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Ontario. Legislative assembly.
Sessional papers.

97
7
SESSIONAL PAPERS.

— P — 36
—
VOL. XLIV.—PART V.
—

FIRST SESSION

OF THE

THIRTEENTH LEGISLATURE

OF THE

PROVINCE OF ONTARIO.

—
SESSION 1912.
—

TORONTO:

Printed and Published by L. K. CAMERON, Printer to the King's Most Excellent Majesty
1912

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TORONTO



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LIST OF SESSIONAL PAPERS

ARRANGED ALPHABETICALLY.

TITLE.	No.	REMARKS.
Accounts, Public	1	<i>Printed.</i>
Agricultural College, Report	29	"
Agricultural and Experimental Union, Report	31	"
Agricultural Societies, Report	43	"
Agriculture, Department of, Report	28	"
Apples, Barrels of, at Demonstration Orchards	75	<i>Not Printed.</i>
Archivist, Report	50	<i>Printed.</i>
Auditor, Provincial, Statement of	53	"
Bee-keepers' Association, Report	37	<i>Printed.</i>
Bi-lingual Schools, Merchant's Report	62	<i>Printed for Distribution.</i>
Births, Marriages and Deaths, Report	19	<i>Printed.</i>
Boundary, Ontario and Manitoba, Correspondence	54	<i>Printed for Distribution.</i>
Boundary, Ontario and Manitoba, Order-in-Council	59	<i>Not Printed.</i>
Canadian Hospital Association	81	<i>Printed for Distribution.</i>
Charities and Correction Conference	80	<i>Printed for Distribution.</i>
Children, Neglected, Report	26	<i>Printed.</i>
Combines, Prosecution of Alleged	82	<i>Not Printed.</i>
Compensation for Injuries to Employees	65	<i>Printed.</i>
Corn Growers' Association, Report	35	"
Dairymen's Association, Report	38	<i>Printed.</i>
Demonstration Orchards, Apples at	75	<i>Not Printed.</i>
Dempsey, S. J., Correspondence	83	"
Division Courts, Report	5	<i>Printed.</i>
Education Report	16	<i>Printed.</i>
Education, Orders-in-Council	57	<i>Not Printed.</i>
Education, English-French Schools Report	62	<i>Printed for Distribution.</i>
Education, Correspondence, Teaching in Springer	78	<i>Not Printed.</i>
Elections, Interference in, by Officials	72	"
Elections, Returns from Records	49	<i>Printed.</i>
Employers and Employees, Compensation for Injuries, Report	65	"

TITLE.	No.	REMARKS.
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Entomological Society, Report	36	<i>Printed.</i>
Estimates	2	"
Factories, Report	45	<i>Printed.</i>
Farmers' Institutes, Report	40	"
Feeble-Minded, Report	23	"
Fruit Branch, Report	33	"
Fruit-Growers' Report	32	"
Game and Fisheries, Report	13	<i>Printed.</i>
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Insane Hospitals, Report	21	"
Insurance, Report	10	"
James Bay Surveys, Report	70	<i>Printed for Distribution.</i>
Judicature Act, Commutation	63	<i>Not Printed.</i>
Labour, Report	15	<i>Printed.</i>
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Loan Corporations, Statements	11	"
Mines, Report	4	<i>Printed.</i>
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Psychiatry in Ontario, Bulletin	69	<i>Printed for Distribution.</i>
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Veterinary College, Report	30	"
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| No. | 1 | Public Accounts of the Province for the year ending 31st October, 1911. Presented to the Legislature, 19th February, 1912. <i>Printed.</i> |
| No. | 2 | Estimates—Supplementary for the service of the Province for the year ending 31st October, 1912. Presented to the Legislature, 26th February and 28th March, 1912. <i>Printed.</i> Estimates for the year ending 31st October, 1913. Presented to the Legislature, 1st April, 1912. <i>Printed.</i> |

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| No. | 3 | Report of the Minister of Lands, Forests and Mines for the year 1911. Presented to the Legislature, 9th April, 1912. <i>Printed.</i> |
| No. | 4 | Report of the Bureau of Mines, for the year 1911. Presented to the Legislature, 15th March, 1912. <i>Printed.</i> |
| No. | 5 | Report of the Inspector of Division Courts, for the year 1911. Presented to the Legislature, 1st March, 1912. <i>Printed.</i> |
| No. | 6 | Report of the Inspector of Legal Offices, for the year 1911. Presented to the Legislature, 13th March, 1912. <i>Printed.</i> |

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| No. | 7 | Report of the Inspector of Registry Offices, for the year 1911. Presented to the Legislature, 26th March, 1912. <i>Printed.</i> |
| No. | 8 | Report of the Provincial Municipal Auditor, for the year 1911. Presented to the Legislature, 11th April, 1912. <i>Printed.</i> |
| No. | 9 | Report of the Commissioners for the Queen Victoria Niagara Falls Park, for the year 1911. Presented to the Legislature, 18th March, 1912. <i>Printed.</i> |
| No. | 10 | Report of the Inspector of Insurance and Registrar of Friendly Societies, for the year 1911. Presented to the Legislature, 1st March, 1912. <i>Printed.</i> |

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| No. 12 | Report of the Minister of Public Works of the Province, for the year 1911. Presented to the Legislature, 1st March, 1912. <i>Printed.</i> |
| No. 13 | Report of the Game and Fisheries Department, for the year 1911. Presented to the Legislature, 1st March, 1912. <i>Printed.</i> |

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| No. 15 | Report of the Bureau of Labour, for the year 1911. Presented to the Legislature, 11th April, 1912. <i>Printed.</i> |

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| No. 17 | Report of the Board of Governors of the University of Toronto, for the year ending 30th June, 1911. Presented to the Legislature, 22nd February, 1912. <i>Printed.</i> |

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| No. 18 | Report of the Secretary and Registrar of the Province, for the year 1911. Presented to the Legislature, 2nd April, 1912. <i>Printed.</i> |
| No. 19 | Report upon the Registration of Births, Marriages and Deaths, for the year 1910-11. Presented to the Legislature, 1st March, 1912. <i>Printed.</i> |
| No. 20 | Report of the Provincial Board of Health, for the year 1911. Presented to the Legislature, 1st March, 1912. <i>Printed.</i> |
| No. 21 | Report on the Hospitals for the Insane, for the year 1911. Presented to the Legislature, 18th March, 1912. <i>Printed.</i> |
| No. 22 | Report on the Hospitals for Idiots and Epileptics, for the year 1911. Presented to the Legislature, 18th March, 1912. <i>Printed.</i> |

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- No. 23 Report upon the Feeble-Minded, for the year 1911. Presented to the Legislature, 26th March, 1912. *Printed.*
- No. 24 Report upon the Hospitals and Charities, for the year 1911. Presented to the Legislature, 25th March, 1912. *Printed.*
- No. 25 Report upon the Common Gaols and Prisons, for the year 1911. Presented to the Legislature, 18th March, 1912. *Printed.*
- No. 26 Report upon Neglected and Dependent Children, for the year 1911. Presented to the Legislature, 22nd March, 1912. *Printed.*
- No. 27 Report upon the Operation of the Liquor License Acts, for the year 1911. Presented to the Legislature, 3rd April, 1912. *Printed.*

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- No. 28 Report of the Department of Agriculture, for 1911. Presented to the Legislature, 2nd April, 1912. *Printed.*
- No. 29 Report of the Agricultural College and Agricultural Farm, for the year 1911. Presented to the Legislature, 3rd April, 1912. *Printed.*
- No. 30 Report of the Ontario Veterinary College, for the year 1911. Presented to the Legislature, 2nd April, 1912. *Printed.*
- No. 31 Report of the Ontario Agricultural and Experimental Union, for the year 1911. Presented to the Legislature, 3rd April, 1912. *Printed.*
- No. 32 Report of the Fruit Growers' Association of Ontario, for the year 1911. Presented to the Legislature, 2nd April, 1912. *Printed.*
- No. 33 Report of the Fruit Branch of the Department of Agriculture, for the year 1911. Presented to the Legislature, 2nd April, 1912. *Printed.*
- No. 34 Report of the Ontario Vegetable Growers' Association, for the year 1911. Presented to the Legislature, 3rd April, 1912. *Printed.*
- No. 35 Report of the Corn Growers' Association, for the year 1911. Presented to the Legislature, 2nd April, 1912. *Printed.*

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- No. 36 Report of the Entomological Society of Ontario, for the year 1911.
Presented to the Legislature, 2nd April, 1912. *Printed.*
- No. 37 Report of the Ontario Bee-Keepers' Association, for the year 1911.
Presented to the Legislature, 3rd April, 1912. *Printed.*
- No. 38 Report of the Dairymen's Associations of Ontario, for the year 1911.
Presented to the Legislature, 3rd April, 1912. *Printed.*
- No. 39 Report of the Live Stock Associations of Ontario, for the year 1911.
Presented to the Legislature, 22nd February, 1912. *Printed.*
- No. 40 Report of the Farmers' Institutes of Ontario, for the year 1911.
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- No. 41 Report of the Women's Institutes of Ontario, for the year 1911.
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- No. 42 Report of the Horticultural Societies of Ontario, for the year 1911.
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- No. 43 Report of the Agricultural Societies of Ontario, for the year 1911.
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- No. 44 Report of the Bureau of Industries, for the year 1911. Presented
to the Legislature, 2nd April, 1912. *Printed.*
- No. 45 Report of the Inspectors of Factories, for the year 1911. Presented
to the Legislature, 2nd April, 1912. *Printed.*

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- No. 46 Report of the Temiskaming and Northern Ontario Railway, for
the year ending 31st October, 1911. Presented to the Legisla-
ture, 22nd February, 1912. *Printed.*
- No. 47 Report of the Hydro-Electric Power Commission, for the year 1911.
Presented to the Legislature, 11th April, 1912. *Printed.*
- No. 48 Report of the Ontario Railway and Municipal Board, for the year
1911. Presented to the Legislature, 11th April, 1912.
Printed.

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- No. 49 Return from the Records of the General Elections in 1911. Pre-
sented to the Legislature, 7th February, 1912. *Printed.*

- No. 50 Report of the Archivist of Ontario. Presented to the Legislature, 3rd April, 1912. *Printed.*
- No. 51 Report on the State of the Legislative Library. Presented to the Legislature, 8th February, 1912. *Not Printed.*
- No. 52 Report of the Game and Fisheries Commission, for 1909-11. Presented to the Legislature, 2nd April, 1912. *Printed.*

CONTENTS OF PART XIV.

- No. 53 Statements of Provincial Auditor under Audit Acts. Presented to the Legislature, 26th March, 1912. *Printed.*

- No. 54 Return to an Address to His Honour the Lieutenant-Governor of the Fourteenth day of February, 1912, praying that he will cause to be laid before this House a Return of copies of—

1. All correspondence which has passed since the 1st day of August, 1908, between the Government of the Province of Ontario or any member thereof or any person on its behalf, and the Government of the Dominion of Canada, or any member thereof or any person on its behalf, in reference to the Boundary between the Provinces of Ontario and Manitoba, through the territory now known as the District of Keewatin.

2. All correspondence which has passed since the 1st day of August, 1908, between the Government of the Province of Ontario or any member thereof or any person on its behalf, and the Government of the Province of Manitoba or any member thereof or any person on its behalf, in reference to the boundary between the Province of Ontario and Manitoba through the territory now known as the District of Keewatin.

3. All other papers in the possession of the Government in reference to the said boundary, including all reports in the possession of the Government in reference to the character and resources of the territory now known as the District of Keewatin. Presented to the Legislature, 20th February, 1912. *Mr. Rowell. Printed for Distribution.*

- No. 55 Return to an Order of the House of the Fourteenth day of February, 1912, shewing—

1. What prosecutions have been instituted against parties in Northern Ontario for the illegal sale of liquor in Northern Ontario during the calendar year 1911.

2. The result of such prosecutions.

3. What amount the Government has received during the calendar year 1911 by way of fines imposed for the illegal sale of liquor in Northern Ontario. Presented to the Legislature, 20th February, 1912. *Mr. McDonald. Not Printed.*

No. 56 Copies of Orders-in-Council in accordance with the provisions of s-s. 6 of s. 78 of the Surrogate Courts Act. Presented to the Legislature, 22nd February, 1912. *Not Printed.*

No. 57 Copies of Orders-in-Council and Regulations required by section 27 of the Department of Education Act. Presented to the Legislature, 22nd February, 1912. *Not Printed.*

No. 58 Copy of Questions submitted to the Supreme Court, by the Government of Canada, relative to the *Ne Temere* decree and an Act to amend the Marriage Act. Presented to the Legislature, 27th February, 1912. *Not Printed.*

No. 59 Copy of an Order-in-Council of the Government of Canada, respecting the Boundary Line between Ontario and Manitoba. Presented to the Legislature, 27th February, 1912. *Not Printed.*

No. 60 Report upon Infant Mortality in the Province. (*Not Presented.*)

No. 61 Return to an Order of the House of the 23rd of February, 1912, for a Return of all correspondence from August, 1st, 1911, to date, between the Attorney-General or any official of his Department and any person or persons of the Town of Chesley or elsewhere, respecting the prosecution, conviction and fining of one Charles Subject by Magistrate Montgomery for an infringement of the provisions of the Liquor License Act. Presented to the Legislature, 1st March, 1912. *Mr. McDonald. Not Printed.*

No. 62 Merchant's report on the condition of English-French Schools in the Province. Presented to the Legislature, 6th March, 1912. *Printed for Distribution.*

No. 63 Copy of an Order-in-Council increasing the commutation paid to His Honour A. D. Hardy, Judge of the County Court of Brant. Presented to the Legislature, 13th March, 1912. *Not Printed.*

No. 64 Return to an Order of the House of the Twenty-sixth day of February, 1912, for a Return of copies of: 1. All correspondence between the Government or any member or official thereof or the Temiskaming and Northern Ontario Railway Commission or any member or official thereof and the Grand Trunk Pacific Railway Company or the Grand Trunk Railway or any official of either of them with respect to.

(a) The acquisition of running rights over the Temiskaming and Northern Ontario Railway;

(b) The leasing, running, or operating of dining, cafe, or buffet cars on the tracks of the Temiskaming and Northern Ontario Railway.

2. All agreements between the Government of Ontario or any department thereof or the Temiskaming and Northern Ontario Railway Commission and any other person or corporation with respect to:

(a) The acquisition of running rights over the Temiskaming and Northern Ontario Railway;

(b) The leasing, running, or operating of dining, cafe, or buffet cars on the tracks of the Temiskaming and Northern Ontario Railway. Presented to the Legislature, 19th March, 1912. *Mr. Rowell. Not Printed.*

No. 65 Interim Report on Laws, relating to the liability of employers to make compensation to their employees for injuries received in the course of their employment which are in force in other countries and as to how far such laws are found to work satisfactorily. Presented to the Legislature, 29th March, 1912. *Printed.*

No. 66 Agreement made by and between the Kinleith Paper Company, Limited, of the first part, and His Majesty the King, represented by the Honourable the Treasurer, of the second part, conditioned for the supply of printing paper for the use of the Province. Presented to the Legislature, 20th of March, 1912. *Printed.*

No. 67 Agreement made by and between the Montrose Paper Mills, Limited, of the first part and His Majesty the King, represented by the Honourable the Treasurer, of the second part, conditioned for the supply of printing paper for the use of the Province. Presented to the Legislature, 20th March, 1912. *Printed.*

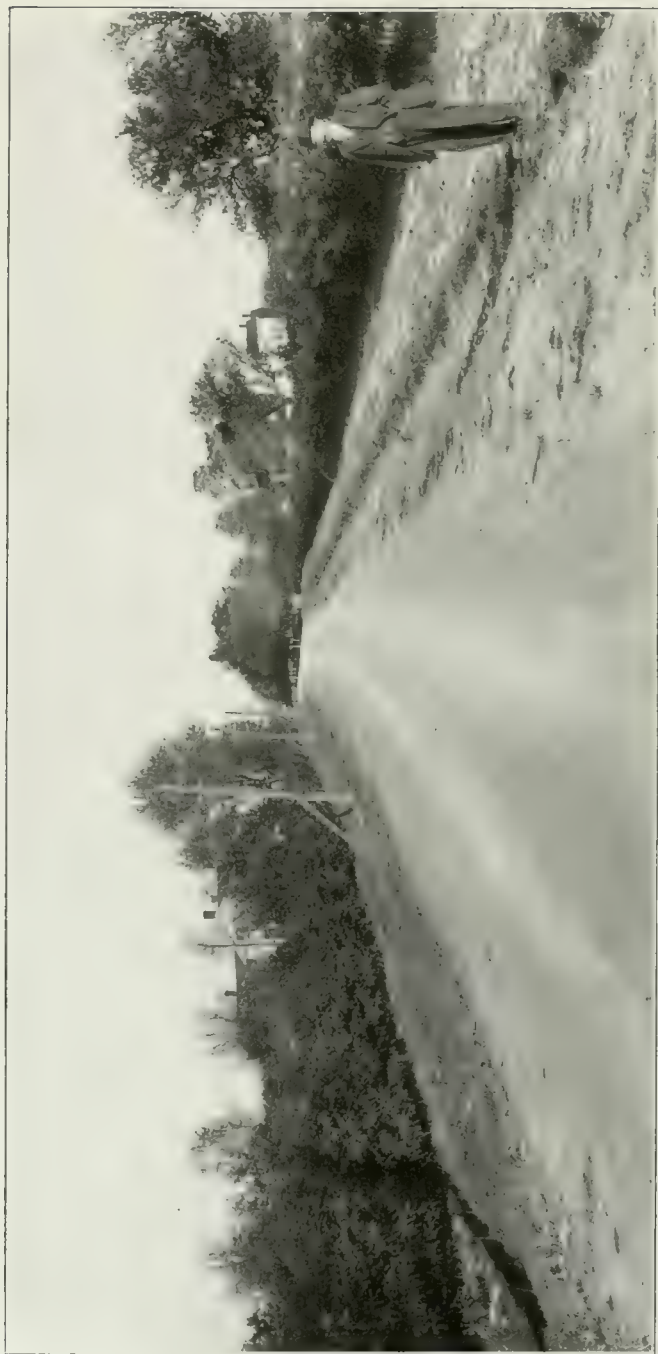
No. 68 Agreement made by and between the Georgetown Coated Paper Mills, Limited, of the first part, and His Majesty the King, represented by the Honourable the Treasurer, of the second part, conditioned for the supply of printing paper for the use of the Province. Presented to the Legislature, 20th March, 1912. *Printed.*

No. 69 Bulletin of the Ontario Hospitals for the Insane in the interests of Psychiatry. Presented to the Legislature, 21st March, 1912. *Printed for Distribution.*

- No. 70 Report on James Bay Survey Explorations, Cochrane to James Bay, June 9th to September 12th, 1911. Presented to the Legislature, 21st March, 1912. *Printed for Distribution.*
- No. 71 Report of special investigation into the cause of Typhoid Fever in the Town of Sarnia. Presented to the Legislature, 21st March, 1912. *Printed.*
- No. 72 A Return to an Order of the House of the 14th February, 1912, for a Return shewing: 1. All complaints received by the Government since the first day of January, 1911, in reference to the participation of any officers, officials or employees of the Government in political contests or taking part in political matters in this Province.
2. All correspondence arising out of or incidental to such complaints.
3. All correspondence passing between the Government or any Department or Member thereof and any officer, officials, or employees of the Government with reference to the participation of such officers, officials or employees in political contests or taking part in political matters in this Province since the first day of January, 1911. Presented to the Legislature, 22nd March, 1912. *Mr. Mageau. Not Printed.*
- No. 73 Statement of the distribution of Revised and Sessional Statutes. Presented to the Legislature, 25th March, 1912. *Not Printed.*
- No. 74 Return to an Address to His Honour the Lieutenant-Governor of the 14th February, 1912, praying that he will cause to be laid before this House a Return of copies of all correspondence between the Government of the Province of Ontario or any member thereof, or any person on its behalf, and the Government of the Dominion of Canada, or any member thereof, or any person on its behalf, with reference to the construction of permanent highways in the Province or grants to aid in such construction. Presented to the Legislature, 26th March, 1912. *Mr. Ferguson (Kent). Not Printed.*
- No. 75 Return to an Order of the House of the 27th February, 1912, showing:—1. How many barrels of apples were produced in each year in each of the 45 Demonstration Orchards instituted by the Government. 2. What was the sale price *per* barrel of the apples from each of the said Demonstration Orchards. 3. What are the names and qualifications of the several orchard demonstrators now in the employ of the Government. Presented to the Legislature, 26th March, 1912. *Mr. Anderson (Bruce). Not Printed.*

- No. 76 Return to an Order of the House of the 8th March, 1912, for a Return of copies of all correspondence between any person and the Government or any member thereof with respect to the construction of a Branch of the Temiskaming and Northern Ontario Railway to Elk Lake or further, with memorandum of dates upon which delegations waited upon the Government or any member thereof in support of the construction of the said Branch; also all surveyors' or other reports received by the Government with respect to the feasibility and cost of construction of the said Branch and all other papers or documents bearing upon the question of the construction of the said Branch. Presented to the Legislature, 27th March, 1912. *Mr. Mageau. Not Printed.*
- No. 77 Return to an Order of the House of the 23rd February, 1912, for a Return shewing: The names of all persons to whom payments have been made in connection with the present Revision of the Statutes, and the total amount paid to each, and the services or other matter in respect of which such payments were made. Presented to the Legislature, 29th March, 1912. *Mr. Proudfoot. Not Printed.*
- No. 78 Return to an Order of the House of the 15th March, 1912, for a Return of copies of all correspondence since the first day of January, 1911, between the Minister of Education, the Deputy-Minister of Education or any Official of the Department of Education and any School Trustee, Board of Trustees, or any person in the Township of Springer, with respect to the character of teaching in the Schools of the said Township, with respect to the teaching of French in the said Schools, with respect to the employment of teachers in the said Schools, or with respect to the giving or withholding of grants from the said Schools or any of them. Presented to the Legislature, 1st April, 1912. *Mr. Marshall. Not Printed.*
- No. 79 Return to an Order of the House of the 28th day of February, 1911, for a Return shewing: (a) The number of sales of timber limits which have taken place in each year since 1905; (b) The location and acreage of each limit sold; and (c) The name of the purchaser in each case; (d) The price paid per acre, or otherwise, in each case; (e) The berth, or area of each berth, which had been under permit previous to the sale, with the original date of the permit; (f) The area of each berth damaged by fire previous to the sale; (g) The berth, or berths, which were virgin territory; (h) The reasons which caused each timber sale to be held from 1905 down to date; (i) The number of permits to cut timber current in the season of 1904-5; the number of permits to cut timber current in the season of 1910-11. Presented to the Legislature, 3rd April, 1912. *Mr. MacKay. Not Printed.*

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| No. 80 | Report of Proceedings of the Twelfth Canadian Conference of Charities and Correction. Presented to the Legislature, 10th April, 1912. <i>Printed for Distribution.</i> |
| No. 81 | Report of the Sixth Annual Meeting of the Canadian Hospital Association. Presented to the Legislature, 10th April, 1912. <i>Printed for Distribution.</i> |
| No. 82 | Return to an Order of the House of the 14th February, 1912, for a Return of copies of all correspondence passing in the years 1905 and 1906 between the Attorney-General or any officer or official of his Department and Mr. J. W. Curry, K.C., Crown Attorney of the City of Toronto, or his successor, with reference to the prosecution of any alleged combines and all briefs, statements or other documents furnished by Mr. Curry to the Attorney-General or any officer or official of his Department with reference to any of the said alleged combines. Presented to the Legislature, 10th April, 1912. <i>Mr. Elliott. Not Printed.</i> |
| No. 83 | Return to an Order of the House of the 9th April, 1912, for a Return of copies of (1) All correspondence between the Government or any Minister or Officer thereof and any person, association, board or organization whatsoever, between the 1st day of July, 1911, and the present date; and also (2) All protests, resolutions, objections or written statements of any kind whatsoever received by the Government or any Minister or Officer thereof, between the said dates with respect to: (a) The conduct of one S. J. Dempsey, in his official capacity as Police Magistrate or as Crown Lands Agent; (b) The participation of the said S. J. Dempsey in the Federal Election contest in South Renfrew; (c) The participation of the said S. J. Dempsey in the Provincial Election contests held in December, 1911. Presented to the Legislature, 12th April, 1912. <i>Mr. McQueen. Not Printed.</i> |



BETWEEN BELLEVILLE AND TRENTON IN HASTINGS COUNTY.

Newly graded, gravelled and rolled.

ANNUAL REPORT

ON

Highway Improvement

ONTARIO

1912

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



TORONTO:

Printed by L. K. CAMERON, Printer to the King's Most Excellent Majesty

1912

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To His Honour SIR JOHN MORISON GIBSON, Knight Commander of the Most Distinguished Order of St. Michael and St. George, a Colonel in the Militia of Canada, etc., etc., etc.,

Lieutenant-Governor of the Province of Ontario.

MAY IT PLEASE YOUR HONOUR:—

I herewith beg to present for your consideration the annual report of W. A. McLean, Chief Engineer of Highways, relating to Highway Improvement in the Province of Ontario.

Respectfully submitted,

I. O. REAUME,

Minister of Public Works.

HONOURABLE J. O. REAUME,

Minister of Public Works, Ontario.

SIR,—I have the honour to transmit to you the report of the Highways Branch to the Public Works Department for the year 1911. The report contains details of the expenditure by the several counties, eighteen in all, operating under the Highway Improvement Act. The total expenditure under the Act in 1911 amounted to \$712,072.52 of which the Province paid \$237,357.50. The total expenditure under the Act from 1902 to the close of 1911 amounts to the sum of \$3,402,602.01.

The report also contains the consolidation of the Highway Improvement Act, 7 Edward, Chapter 16, with all amendments.

The latest information on road construction, road metal and highway bridges and culverts, with illustrations, form interesting features of the report.

I have the honour to be,

Sir,

Your obedient servant,

R. P. FAIRBAIRN,

Deputy Minister of Public Works.

Toronto, April 2nd, 1912.

To the Honourable J. O. REAUME,

Minister of Public Works.

SIR,—I have the honour to transmit to you the annual report on road and bridge construction in Ontario, having special reference to the work carried on by the several counties of the Province during the year 1911 under the Act to Aid in the Improvement of Public Highways.

I have the honour to be,

Sir,

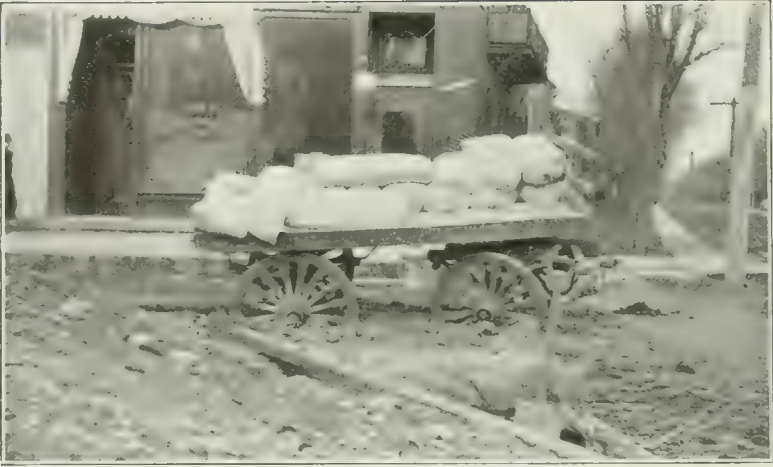
Your obedient servant,

W. A. McLEAN,

Provincial Engineer of Highways.

Parliament Buildings, Toronto,

March 1st, 1912.



CHESTNUT STREET, DUNNVILLE.

On the main business street in April, 1911.



CHESTNUT STREET, DUNNVILLE.

A photograph at the same corner, Nov., 1912, when paved with concrete.

ANNUAL REPORT ON HIGHWAY IMPROVEMENT

By W. A. McLean, M. Can. Soc. C.E., Provincial Engineer of Highways.

The work of the Ontario office of Public Highways has, during the past year, been of the usual nature, covering its several main features. These comprise:

1. The administration of the Act to Aid in the Improvement of Public Highways, with specific supervision of county road systems of the Province;
2. An educative work in practical road-building applied to all municipalities;
3. An educative influence respecting the value of good roads, and the necessary organization for construction and maintenance;
4. The administration of provisions of the Municipal Act with respect to the examination and approval of specifications for steel and concrete highway bridges.

Township Roads.

Co-operation of municipal councils with this office has been encouraged, particularly in the case of townships; and advice and assistance as far as possible have been given with respect to roads and bridges, where such means were sought with a view to the broader improvement of road management. A specific effort has been made to keep in touch with townships which have wholly commuted or abolished statute labor, in order that each township overseer might be given useful information relating to his work. To this end a considerable amount of literature has been distributed among municipal councillors and road overseers. Statistics previously collected by the office have shown that townships of the Province are spending annually about \$1,400,000 in cash and \$1,100,000 days of statute labor on their roads and bridges. It is of manifest importance that this large expenditure, representing a value of \$2,500,000 each year, should be directed as effectively as possible. To secure good results from the expenditure now being made by township councils is a necessary preparation for the best use of a larger future outlay on this work.

County Roads in 1911.

During the year 1911 the following counties, eighteen in number, were constructing roads under the Highway Improvement Act:—Carleton, Frontenac, Halton, Hastings, Lanark, Leeds and Grenville, Lennox and Addington, Lincoln, Middlesex, Oxford, Peel, Perth, Prince Edward, Simcoe, Waterloo, Wellington, Wentworth and York.

A summary of the total expenditure on county roads for the year is as follows:

Road Construction	\$407,547 90
Permanent bridges	213,162 41
Superintendence	15,764 73
Machinery, plant and equipment	39,946 22
Special county grants to townships, towns and villages	18,821 26
Toll roads	16,830 00
Total for year 1911	\$712,072 52

Provincial grants of one-third the total expenditure, in accordance with the Highway Improvement Act, amounted to \$237,357.50, payment being made during the Provincial fiscal year 1911-12. County expenditure, or the remaining two thirds, was \$474,715.00.

The roads graded, drained and metalled with broken stone and gravel amounted to 240 miles. The expenditure included the construction of 281 tile culverts, 155 other culverts of less than 10 feet span; and 113 bridges of more than 10 feet span. Culvert and bridge construction was all of a permanent type, using concrete tile and corrugated iron for small waterways; principally concrete for culverts of a larger size; and steel and reinforced concrete for bridges, piers and abutments being of solid concrete. Bridge and culvert construction largely proceeds in advance of actual road improvement, as in many cases, the immediate re-building of old and decayed wooden bridges on the designated county roads is imperative in the interest of public safety.

Total County Road Expenditure.

The total expenditure on county roads from the passing of The Highway Improvement Act in 1901 to 1911, inclusive, has been as follows:—

Road construction (including culverts less than 10 feet span)	\$2,221,991 37
Permanent bridges	690,597 02
Machinery, plant and equipment	185,689 54
County grants to townships, towns and villages	131,496 10
Toll roads purchased	172,827 98
Total expenditure years 1902 to 1911, inclusive	\$3,402,602 01
Total Government grants, one-third	\$1,134,200 67
Total amount raised by counties, two-thirds...	\$2,268,401 34

The earlier statements of expenditure made to the Department under the Act do not clearly distinguish the cost of engineering superintendence, but the statements now being received indicate it to be about 3 per cent. of the total outlay.

Expenditure by Counties.

The following schedule shows the total expenditure to the close of the year 1911 according to counties :

County.	Year of commencement under the Act.	Total length of county system in miles.	Expenditure under Act in 1911.	Total expenditure to the end of 1911.	Government aid to end of season of 1911.	Government grant for 1911.
			\$ c.	\$ c.	\$ c.	\$ c.
Wentworth	1902	140	14,542 94	388,201 82	128,067 28	4,847 65
Lanark	1903	98	8,492 42	147,774 50	55,924 83	2,830 81
Simcoe	1903	427	28,968 55	435,070 35	145,023 49	9,656 18
Wellington.....	1903	170	33,145 38	192,769 91	64,256 61	11,048 46
Lincoln	1904	36	12,354 59	85,447 37	28,482 46	4,118 20
Oxford.....	1904-07	256	53,510 44	392,271 71	130,757 23	17,836 81
Hastings.....	1904	472	106,763 75	312,586 78	104,195 58	35,587 92
Peel	1906	102	42,820 03	245,987 81	81,995 94	14,273 34
Middlesex	1906	220	65,622 13	230,755 40	76,918 46	21,874 04
Lennox and Addington....	1906	169½	14,793 03	101,372 02	33,790 67	4,931 01
Prince Edward	1907	122	35,228 77	165,859 61	55,286 53	11,742 92
Halton	1907	189	61,161 70	170,914 40	56,971 47	20,387 23
Perth	1907	210	21,244 01	134,597 05	44,865 68	7,081 34
Frontenac	1907	127	29,615 16	85,981 77	28,660 59	9,871 72
Waterloo	1908	175	21,777 49	76,917 67	25,639 22	7,259 16
Carleton	1909	220	23,436 52	52,707 57	17,569 19	7,812 17
Leeds and Grenville	1910	247	100,276 70	129,067 36	43,022 46	33,425 57
York	1911	114	38,318 91	38,318 91	12,772 97	12,772 97
Haldimand	1911	125				
Totals.....		3,619½	712,072 52	3,402,602 01	1,134,200 66	237,357 50

The Highway Improvement Act.

The Highway Improvement Act was originally passed in 1901; was consolidated and revised in 1907, has received minor amendments at each subsequent session of the Legislature, but the amendments of the session of 1912 are the most extensive and important since the revision of 1907.

The main feature of the Act is the creation of county road systems upon which a considerable amount of important highway construction is being carried on by county councils. To this work the Provincial Government contributes one-third of the cost.

The general basis of the Act is as follows:

1. A county council is authorized to assume a system of roads for construction and maintenance.

2. A by-law adopting such a system may be passed by a two-thirds majority of a county council representing at least one-half of the total equalized assessment of the county.

3. Failing to receive a two-thirds majority of the county council, it may be carried by a simple majority, and a majority vote of the ratepayers.

4. The roads assumed are usually such as will accommodate the greater part of local market travel, creating a system of main market roads. They should be connected as far as practicable to serve the needs of through traffic of the locality. These county systems should not be confused with old county roads.

many of which have ceased to be the roads of greatest travel; the trend of traffic is constantly changing through the building of new railroads, and the creation or growth of new local markets and shipping points.

5. The mileage of roads assumed varies, but is usually from 12 to 15 per cent. of the total road mileage of a county.

6. The direction and superintendence of the work is placed in charge of a county engineer or capable superintendent appointed by the county council. A committee of the county council should co-operate with, advise and direct the road superintendent, but no municipal councillor can be employed by the road superintendent in any capacity.

7. Roads are to be built in accordance with the regulations of the Public Works Department. The construction should be suited to local circumstances of material and traffic. A standard type is regarded as a roadway well drained.



"THE SCOTCH LINE," LANARK COUNTY.

The granite knoll to the right of the picture formerly extended across the road. The hill was cut away, the road straightened, and the quarried stone put through a crusher and returned to the road.

graded to a width of 24 feet between ditches, with broken stone or gravel in the centre to a width of from 8 to 15 feet, and consolidated by rolling.

8. The cost varies with local conditions, but is, in general, proportionate to the width and kind of metal.

9. The system of roads assumed, and by-law fixing the plan of improvement, are subject to approval by Order-in-Council. A county council when considering the adoption of a county system or framing their by-law should communicate with the Provincial Engineer of Highways, in order that their plan may be prepared in accordance with the requirements and objects of the Highway Act.

10. When roads are assumed by a county council under this Act, township councils cease to have control over them, nor should they make any expenditure on them. The county council is thereafter responsible for construction and maintenance.

11. The Provincial grant is paid annually, and is based on a statement of expenditure for the year, submitted to the Minister of Public Works by the county council, and includes all costs of labor, material, engineering services, salary of road superintendent, machinery, and bridges on the designated system of county roads.

12. The county council may finance their work by issuing debentures for a term not exceeding thirty years; or by sums raised from year to year in the annual county rate.

13. The cost of purchasing and reconstructing toll roads may be included in the expenditure.

14. Statute labor along the roads belongs to township councils who may have it worked out on adjoining roads, or may wholly commute it and spend it on other roads. If the townships so determine, the fund raised by commuting statute labor may be transferred to the county to be used in repairing the county roads or in keeping them open in winter.

15. The county council may, from time to time make grants to villages and towns, to improve roads which are extensions or connecting links of county roads entering such towns or villages. One-third of grants so made to towns having a population of three thousand or less will be paid by the Province; but in case of towns having a population of more than 1,500 the money must be spent in the suburbs adjoining farm lands. Where the population is 1,500 or less, expenditure made on the designated streets is not restricted to suburban sections. The county thus has power to make a grant irrespective of population, but the limitations apply to grants upon which the Provincial grant of one-third is asked.

Scattered Improvements.

There is a tendency in some counties to distribute the county road work each year in short sections, rather than to take up one road and build it from end to end. Work is scattered in this way for various reasons. Each councillor is ambitious to have some work done in the township he represents; there may be a fear that certain ratepayers will become dissatisfied if all the work is done in another locality; that the total expenditure may become exhausted before all roads are reached; there may be a desire to let all sections in the county see the class of work done on the roads, and to receive some early benefit; a wish to construct a section of road that is especially bad, or is largely travelled. The tendency is greatest in counties where there are numerous market centres or shipping points, and less in the counties with one well defined centre, such as York with roads radiating from Toronto, Wentworth with Hamilton as a leading market, or Prince Edward with much traffic leading to Picton.

To build roads in short sections in some cases, may serve a useful purpose, but the practice is an expensive one and adds largely to the cost. Road building is almost entirely a work of labor, and it is essential to economy that a well arranged organization be created. It commonly takes a month to build a mile of road, and takes nearly that time to get the work going smoothly. To move the plant and equipment from place to place for every mile of road, means that the work will be kept in constant disorganization, that laborers and teamsters which have become accustomed to the location will leave, and new men will take their place, that much time will be lost in moving the machinery from place to place while wages are still going on. Every move made, means a loss of

efficiency, loss of time, useless expenditure for wages, fewer miles built and a much increased cost. Short sections are justifiable and necessary in some cases, but to carry work on in that way as a fixed practice, involves a useless increase of cost. The necessarily increased cost of "model roads" is not an expenditure which counties should assume.

Governmental Aid.

Governmental aid to road construction, as instanced by the Highway Improvement Act, has certain well defined advantages. It guarantees more efficient supervision and organization than municipalities have heretofore provided. It concentrates expenditure for a term of years on a well-defined plan of main roads. It provides a specific plan to be followed by succeeding councils, gradually creating a connected system of well-built roads. A sufficiently large fund becomes available to permit substantial work. Through the Government grant, a certain portion of the cost is contributed by towns and cities.

There is a tendency, however, on the part of municipal councils and the public, to look for a largely increased Provincial grant. In support of such a proposal, the methods and laws of France, Germany and a number of the States are cited.

Large governmental expenditure has been successfully made and is necessary, but the sources of income should be considered. In the countries and states mentioned, the governmental revenues are derived wholly or largely by direct taxation. In Ontario, indirect taxation has been, to the present, the only source of Provincial revenue, while direct taxation is assigned to municipal corporations.

The indirect sources of income are restricted, and the Provincial revenues are thus fixed. Direct taxation, on the other hand, is flexible, and responsive to the ability of the people. With this responsive source of income, it appears advisable that municipalities should draw upon it, as far as their circumstances will permit; to be supplemented, rather than replaced, by Provincial expenditure. The primary object to be reached by Provincial expenditure is the creation of organization such as will equitably distribute the cost of main roads, so constructed and maintained as to adequately meet the needs of traffic.

Road Foremen.

The number of foremen experienced in road construction is very limited in the Province, a condition which is creating temporary difficulty in obtaining the best results from road expenditure. This is especially the case for the first two or three years after a county has established a county road system, and for this reason it is seldom advisable to undertake a large expenditure for the first year.

Road building is an art, and as such requires trained laborers, and skilled supervisors of a class which only experience can create. One of the secrets of the good roads of England and France, is the large body of trained men who, through permanent employment on roads, have become proficient in their work. Practically all municipalities in Ontario, upon undertaking road construction on a comprehensive scale, must expect a certain amount of inferior work with greater cost until experience has created a body of skilled roadmakers.

A capable foreman is most important, and is essential to economical results. He should not only understand thoroughly all practical details of roadmaking, but must have a practical knowledge of machinery, with the ability to direct and control workmen. Road-building is chiefly a matter of labor—men, teams and machinery—and foremen who can combine a knowledge of roads with capacity to direct such labor can only be obtained through the usual process of experience.

Repair and Maintenance.

An efficient system of repair and maintenance is urgently needed in all municipalities of the Province.

Repair implies that, after a road is built, all holes, ruts and depressions appearing in the surface, will be filled. To be efficient, this repair must be done promptly, before extended damage is done to the road. Neglect to repair promptly means that these defects in the road surface become greater with increasing rapidity, until finally, what might have been restored at the cost of a few dollars, requires instead an expenditure of hundreds of dollars. Repair should commence as soon as a road is built.

The recognized system of efficient and prompt repair, is to employ what are variously known as section-men, patrol-men, or length-men. The road is divided into suitable sections or lengths, and a patrol-man is placed in charge of each



A ROAD-CAMP IN LANARK COUNTY.

A road camp results in less loss of time due to unsettled weather and in going to and from work. The difficulty of boarding men and teams close to the work is overcome, so that men and teams can be hired over a wide area, instead of in the immediate locality of the work only.

section. Small piles of stone are placed at regular intervals and the patrol man is supplied with a pick, shovel, pounder, and other tools. The road is constantly watched, especially after a rain, and wherever pools or depressions appear, these are marked, and as quickly as possible filled with new stone. This prevents the accumulation of injury through neglected depressions, and steadily keeps the road surface smooth and in good condition.

This system of constant repair, is the basis of the excellent road systems of France, Germany, England, New York State -and wherever good roads are consistently supported. Prompt and systematic repair was the reform most urgently sought by the great French road engineer Tresaguet, and by Telford and Macadam in England.

Maintenance, as distinguished from repair, implies not only that holes and depressions will be promptly filled, and that minor repairs will be effectively carried on, but also that the uniform wear of the road will be restored from time to time, so that the thickness of the road crust will not be allowed to diminish, becoming thin and weak. Instead of being neglected in this regard, instead of the road crust being permitted to become too thin, there should be a general application of new broken stone, from time to time. Increasing requirements of traffic should be recognized, and instead of becoming thinner, the effort should be to gradually increase the thickness of the crust, and to widen it as traffic may require.

A proper policy of repair and maintenance will thus provide that:—

- (1) There will be a continuously good road surface.
- (2) The road crust will in no case be allowed to be broken through.
- (3) The hollows, wheel tracks and depressions will be restored as soon as they appear.
- (4) This repair will be carried on promptly and systematically, by section men employed as soon as the road is built.
- (5) The thickness of the road crust will be maintained by general applications of stone from time to time.
- (6) Growth of traffic will be provided for by gradually increasing the thickness and width of the road crust.

Such a policy will permit the construction of cheaper and narrower roads at first. The initial expenditure can be kept at the lowest amount, while the future can, by annual but not burdensome rates, take care of wear, provide for increasing traffic, and at the same time preserve the capital investment.

It is to be hoped that the citizens and councils of Ontario will learn by the experience of others, rather than by costly experience of their own, the great importance of scientific repair and maintenance in creating a system of good roads.

Machinery.

The cost of road construction has been steadily increasing for some years with the advance of wages for men and teams. Road building is almost entirely a matter of labor so that the increase has been very marked. Ten years ago, men were commonly employed in the townships for \$1.25, and teams for \$3.50 a day. The price now commonly paid is \$2.00 a day for men and \$5.00 for teams, while as high as \$3.00 a day for men and \$6.00 for teams has in some instances been necessary. With the advance in wages there has been a decrease in labor efficiency, as with abundance of employment, men and teamsters have not had the former incentive to "hold their jobs."

The use of machinery to replace teams and manual labor, with greater efficiency of organization and supervision, comprise the only available remedy, and one which is satisfactory to the farmers of most townships as they need all available farm laborers. Stone could be quarried, and field stone collected in winter, teamed and piled ready for crushing, more frequently than is now done, thus giving employment during winter when men and teams have little to do, and would work for less wages.

The efficient use of machinery requires that it be kept steadily employed.

otherwise the interest and depreciation charges over-balance profit. To this end the construction of main roads, as now centralized in county councils, is the most profitable method, while the more local method of patching and repairing roads never properly built, is increasingly deficient. To meet the situation, there is need of grading machines operated by traction engines: stone crushing outfits of ample capacity with storage and loading bins: wagon trains or trucks drawn by gasoline motors or steam tractors for hauling gravel and stone: equipment for unloading stone from cars where material is procured by rail: while a steam roller is always a necessity for efficient road building such as will lessen future repair.

Township Organization.

Good organization is the first step toward good roads. The statute labor system is not a sound basis on which to build a good business organization. Until townships abolish statute labor, the creation of an efficient organization will be delayed. Efficient organization will have two main features:

1. Expenditure to be wholly on a cash basis instead of statute labor, the money to be raised by a rate on the general township assessment in the same way as other township revenue.



MACHINERY IN ROAD CONSTRUCTION.

The cost of hauling gravel and stone, especially for distances over one mile can be greatly reduced by the means indicated in this illustration—a traction engine and train of wagons as used in Wellington County.

2. Management to be placed under one permanent road foreman for the township, acting under the direction of the council.

These two features permit the application, to road improvement, of principles that are essential to success in any modern business undertaking. The first merely does away with the existing system—statute labor. The second is the all important feature of the system to be put in its place.

Good business management applied to any undertaking requires:—

1. Responsibility should be definitely centralized, and fixed in one manager so that there is a strong incentive for him to obtain the best results and avoid mistakes. This is obtained by having one foreman or overseer, in place of one hundred or more overseers of statute labor.

2. The undertaking as a whole, and each detail of it should be carefully studied and planned in advance. This can only be done by making it the permanent business of one man, who can advise and guide the council from year to year.

3. Experience and skill should be brought to bear on the work. A township foreman should be kept in office just as permanently as is a clerk or treasurer, and in this way only, can townships build up an efficient plan of experienced road management.

Application in Each Township.

In carrying out the system as outlined, it is apparent that success must largely depend on the choice of a man for foreman or overseer. That is true in any business. If an inefficient man is selected and there is a complete failure the first year, it does not mean that statute labor should be retained—but merely that the council should appoint a better foreman. At the same time, too much must not be expected of an inexperienced foreman for the first year.

In placing responsibility on him for results, he must be given corresponding authority, especially in the matter of hiring or discharging men and teams. The council should decide the work to be done, but the doing of the work should be in his hands.

A good foreman can, as time goes on, make a complete study of the local road situation, the relative importance of the various roads, the grading, drainage, and bridging required on each, and the location of gravel or stone. With this knowledge he can be a most valuable guide to succeeding councils just as the township clerk is in other matters.

The work for the year should be decided upon as far as possible before spring opens. The foreman can then commence grading early in the season, before the ground is hard and baked. In July, August and early fall, when streams are low, he can put in small bridges and culverts.

He could arrange to have all earth roads kept in repair by use of the log drag. Gravelled or stone roads could be repaired when they need it. The gravelling or stoning of roads could be looked after at the best season of the year, or when teams are available. If field stone is used, it could be hauled and piled in the winter when farmers would be glad to get the work. These are details which will depend on the local conditions in each township, and should be adjusted accordingly.

Under ordinary circumstances, every road in the township would receive its proper attention, either by dragging, grading, draining or metalling. The log-drag in particular can be of enormous benefit, if its use is systematically arranged.

Traffic Conditions.

Traffic conditions largely determine the kind and strength of road to be built. The regulation of certain traffic features, particularly those pertaining to the width of wagon tires, speed of motor cars, and maximum loads of steam and gasoline motor trucks, can be so applied as to materially lessen the cost of construction and maintenance.

Wider wagon tires, if generally adopted would reduce the wear of roads, and decreased the cost of maintenance. Narrow tires are an expensive luxury, as their grinding, pulverizing effect on limestone roads, and their rutting effect on gravel

is very severe. This is particularly so, in the case of wagons which travel over a fixed route under all weather conditions. Such traffic in spring and fall, when the roads are wet and yielding, is most destructive. Heavily loaded milk wagons which travel to the factory or to the cities at all seasons of the year, heavily loaded wagons carrying the daily output of brickyards, quarries, sand and gravel pits, mills and factories, do a great deal of damage to the roads. Ordinary farm traffic in wet weather, conveyed on narrow tired wagons, does much injury that could readily be prevented by the general use of wide tires.

Narrow tires are preferred by teamsters for the reason that wide tires become heavily clogged with mud on clay roads, and because the narrow tires travel more freely in ruts, and do not strike so many stones. With wide tires, however, there would be much less tendency to create ruts and to loosen stones from the roadway.



A WELLINGTON COUNTY ROAD IN HARRISTON.

The chief objection to wide tires is that first mentioned—the tendency to hold mud between the spokes on soft clay roads under fall and spring conditions. There is, however, very little farm teaming on earth roads while the mud is excessively deep, and under other conditions the advantages of wide tires in preserving and compacting the roads would greatly outweigh their own disadvantages or the convenience of narrow tires.

Motor traffic has advanced very rapidly, and it is difficult to foresee the extent to which it may ultimately grow. That it is destined to a vast increase can scarcely be doubted. The automobile represents horse, harness and vehicle in one, and with a steadily lessening price, its future usefulness in improving the social conditions of farm life would appear very great.

The growth of motor traffic is effecting an important change in road construction and adds a new meaning to the axiom, that a road must be built to meet the traffic conditions to which it will be subjected. Automobile tires, as compared

with wagon tires, are soft and yielding, and in the early days of motor cars it was supposed that their wearing action would be slight. Such, however, is not the case.

The propelling power of a horse-drawn vehicle is communicated to the road through the feet of the horses. Speed is limited and makes little difference. The abrading effect of the steel tires comes solely from a downward pressure varying with the weight of the load and width of tire. Self-propelled vehicles, on the other hand, communicate their driving force to the road at the rim of the wheel. While the downward pressure due to weight of load does little injury, the driving force is very great. It is nearly horizontal, tending to tear away the surface of the road, throwing out the binding material and loosening stones. This shearing force increases with the speed—not in direct proportion; but in proportion to the square of the speed. Thus, taking ten miles as a unit of speed, and comparing with speeds of twenty, thirty and forty miles, the shearing force is not merely twice as great as twenty, three times at thirty and four times at forty; but instead, is four times as great at twenty as at ten miles, nine times as great at thirty, and sixteen times as great at forty miles. At fifty miles an hour, the shearing force is twenty-five times as great as at ten miles.

Excessive speed is thus exceedingly destructive to improved roads. The existing speed law of the Province permitting fifteen miles in cities, and twenty miles an hour on country roads, is very satisfactory from the standpoint of road maintenance. Motor cars of moderate weight travelling at a speed of twenty miles an hour, do comparatively little injury to a well-built road. Heavy cars travelling at a rate of forty or fifty miles an hour do excessive injury which cannot be provided for on ordinary country roads, at reasonable cost, by any form of road construction as yet available.

A study of the more serious motor accidents which have occurred from time to time, indicates that, in the majority of cases, they have been due to excessive speed or to careless or inexperienced driving, and were, therefore, preventible. The unavoidable accidents have been due principally to a suddenly defective steering gear, or to a pedestrian or child unexpectedly stepping in front of the car. Of all these causes, excessive speed has been much the most frequent.

At twenty miles an hour on country roads, a motor car is under reasonable control, can be stopped quickly or turned to avoid an obstruction. Injury to the road, as stated, is within minimum limits. Forty or fifty miles an hour, however, possesses none of these merits, such speeds are recklessly dangerous to the occupants of the car and to other travellers, are destructive to the roads, and accentuate the dust nuisance.

Motor and steam trucks are coming into use on the country highways. A motor truck, itself weighing six tons, can carry an equal load, making twelve tons in all. Two-thirds or eight tons is on the rear axle, one half of that load is on each rear wheel, placing a load of four tons on each wheel. The disruptive effect of this load on road foundations is very great—particularly in wet weather.

Steam trucks, with steel tires, in some cases corrugated, are now in occasional use. As an instance, a five ton steam wagon in running order with fuel and water, weighs about six tons, ten cwt., with about two tons fifteen cwt. on the front axle and three tons, fifteen cwt. on the back axle. Practically all the load would come on the back wheels so that, when loaded with five tons, the actual weight on the back axles would be eight tons, fifteen cwt.—or over four tons seven cwt. on each rear wheel. Trucks carrying fifteen tons and weighing in all about thirty tons are now being manufactured.

Self-propelled gasoline motor and steam trucks, in addition to their heavy concentrated load, have the further disadvantage of exerting a strong driving force referred to in discussing motor car speed, so that their use demands not only a heavy and expensive foundation, but an especially durable surface as well. Legislation limiting extraordinary traffic of this description would appear justifiable, in order that a large increase in the cost of roads may not be necessary to serve the requirements of a few vehicles. Such limitation at the present time would forestall the introduction of unnecessarily heavy vehicles, and would avoid individual hardship. Width of tire alone will not solve the difficulty, as, owing to the necessary camber of the road surface, excessive width places the load on the edge of the tire. Restriction of load permissible on one wheel would appear practicable, and if placed at four tons would at least forestall further increase in Ontario. Should investigation justify it, a less weight would be most desirable in the interest of road maintenance.



THE KENNEDY ROAD IN YORK COUNTY, NEAR TORONTO.
Graded, drained, surfaced with broken stone and rolled.

Rules of the Road.

The rules of the road in posed by the Provincial Statutes are not always understood or observed by drivers of vehicles. These are principally covered by the Highway Travel Act, 2 George V, c. 17, and the Motor Vehicles Act, 2 George V, c. 48. The main features are, briefly, as follows:—

1. When two vehicles meet on the highway, each driver shall turn to his right hand side, allowing the other vehicle one-half of the road.
2. A vehicle or horseman overtaken on the highway shall turn out to the right and allow the overtaking vehicle or horseman to pass on his left hand side.
3. A person overtaking a vehicle or horseman, in passing shall turn to the left hand side sufficiently far to avoid collision: the person overtaken to leave at least one-half of the road free.
4. In the case of a bicycle or tricycle, the foregoing rules apply, except that the bicycle or tricycle can require only sufficient room on the travelled portion of the highway to pass: also when overtaking another vehicle, the person on the bicycle or tricycle is to give audible warning of his approach before attempting to pass.

5. When a vehicle is so heavily loaded that, when meeting or being overtaken, the driver finds it impracticable to turn out, he shall immediately stop, and, if necessary for the safety of the other vehicle or if so required, he is to assist the person in charge to pass without damage.

6. A portable or traction engine is required, if practicable, to give half of the road, and to remain stationary until a horseman or horse-drawn vehicle has passed. The engine is to stop at a distance of not less than one chain from the vehicle, and assistance is to be given to the driver of the horse, if so requested.

7. Between sunset and sunrise, a traction engine on the highway is to be preceded by a person carrying a light.

8. Between sunset and sunrise, a red light is to be carried on the front of an engine, and a green light on the rear.

9. The speed of motor vehicles is restricted to 15 miles an hour, within a city, town or village, and to 20 miles an hour on country roads.

10. Motor vehicles are not to be driven recklessly at any speed or in any manner dangerous to the public, having regard to all circumstances, and the amount of traffic on the highway at the time.

11. The driver of a motor vehicle is to exercise every reasonable precaution to prevent frightening horses driven on the highway.

12. A motor is not to pass a horse-drawn vehicle outside of the limits of a city or town, at a greater speed than 7 miles an hour.

13. Should a horse appear to be frightened, or upon a signal to do so, the driver of a motor vehicle is to stop and take such steps as will enable the horse-drawn vehicle to pass in safety.

14. The rights of a pedestrian on the travelled highway are co-equal with those of a vehicle, and the driver of a vehicle is therefore required to exercise every effort to prevent injury or inconvenience to pedestrians when approaching or passing them. Irrespective of statutory provisions, every reasonable care must be taken to prevent accident to either pedestrians or vehicles.

While the foregoing represent the principal features of the Statutes respecting travel, yet no rules or regulation can possibly take care of the many instances in which courtesy only can facilitate the free and convenient use of the highways.

Misunderstandings are sometimes due to the limitations of the automobile. When a motor car gets into a deep rut, it is almost impossible for the driver to turn out promptly to allow others to pass; also in wet weather, it is very dangerous for an automobile to turn out on a steep or slippery side slope, as the car is very apt to slew and be stuck in the ditch.

A further cause of mis-understanding is due to the fact that, on a good road, an automobile can be turned out in a very short distance. When a motor car approaches a horse-drawn vehicle, the tendency of the chauffeur is to keep on the smooth centre of the road as long as possible. The driver of the horse-drawn vehicle, seeing no indication of the motor car turning out, when he would expect it to do so, goes farther and farther from the centre of the road to avoid collision; or at times because of a nervous horse. When the chauffeur has reached the point at which he would expect to turn out, the horse vehicle is so far from the centre of the road, possibly in the ditch, that there seems no necessity to turn the motor car from the straight course. The result has been a feeling on the part of those who live in the country that this is intentional on the part of the drivers of automobiles, whereas it is more thoughtlessness than otherwise. Drivers of motor cars should commence to turn out at a sufficient distance from horse-drawn vehicles to clearly indicate their intention to give at least half the road.

ROAD CONSTRUCTION.

A perfect roadmaking material, or a single type of road, possessing every desirable quality for service, durability, and cost, has not been found, and from natural reasons, cannot be expected to exist. Roads must be adapted to the traffic they are to carry, and since traffic differs greatly in character, road construction must be varied accordingly. The problem in general is, to use local materials to the best advantage.

Motor traffic is leading to important requirements and modifications, but gravel roads, and broken stone roads substantially as advocated by Tresaguet in France, and Telford and Macadam in England, continue to be the mainstay of road-building.

All roads are important and each deserves a type of construction and system of maintenance in keeping the traffic over it. Some roads have only an



THE KINGSTON ROAD IN YORK COUNTY.
Resurfaced with broken stone.

occasional vehicle passing over them; others may have an average of 1,500 vehicles of all descriptions. Some carry light single-horse vehicles principally; others have a greater proportion of heavy teaming. The amount of motor traffic varies from roads which have few automobiles to those which have a large number of motors and few horse-drawn vehicles. A gravel road will give good service to a considerable amount of light driving; and an oiled gravel road will serve a very large motor traffic if there is a small proportion of horse-drawn vehicles. A water-bound macadam road is easily maintained under a considerable amount of heavy teaming and light driving, but if even a small proportion of rapid motor traffic is added, the cost of maintenance is much increased; and if the motor traffic is of large amount, an asphalt or tar binder becomes necessary, or a durable pavement should be considered. Painting with tar or asphalt will give good service where motor traffic is heavy, with few horse-drawn vehicles; but if proportions of travel are reversed a bituminous paint coat is much less effective. These examples suggest some of the factors entering into the design of a road.

Road Classification.

The roads of Ontario may, for a consideration of construction, be broadly divided into three classes: one grade merging into another, however, at the arbitrary dividing line. It is estimated that in the organized counties of old Ontario there are 50,000 miles of road, and a classification would be approximately as follows:

1. Trunk roads connecting the large towns and cities	5%	or	2,500 miles
2. County or leading market roads	12%	or	6,000 miles
3. (a) Main township roads	50%	or	25,000 miles
(b) Secondary township roads	33%	or	16,500 miles
Total	100%	or	50,000 miles

In the foregoing classification, the roads described as “Trunk Roads” are, with the exception of a few connecting links, among the most important of the county roads, and are heavily travelled for local market purposes, but they carry as well an increasing amount of through inter-urban traffic. The heavy and complex nature of this traffic requires, as a rule, construction of the most durable type varying from a concrete, brick, or other durable pavement to first-class macadam. The classes one and two, including trunk roads and leading market roads, thus include two divisions of what would be the main county roads of the Province. These comprise 17 per cent. or 8,500 miles in all, which if properly selected and constructed should carry 80 per cent. of the traffic of the Province.

The main township roads comprise principally the concession roads on which numerous farms front and which converge into and create the traffic of trunk or county roads. The more important of these should be metalled with gravel or broken stone, if available. Secondary township roads include the little travelled connecting roads which should be graded and given such further treatment as circumstances may permit. The first need for the roads classified as township roads is thorough grading, draining and bridging, and systematic maintenance with the log drag.

Gradients adopted, amount of camber or crown, width and depth of metal, foundation if any, drainage, binding material, and other details, should, as suggested, be largely dictated by the degree of traffic. A good road attracts and creates traffic so that the construction of any one road is very likely to raise it from one class to a higher grade, a matter which should not be lost sight of in planning improvement. Methods of construction should be as simple and direct as proper results will permit. There should, for true economy, be a well adjusted average between maximum service and minimum cost.

Trunk Roads.

Broken stone roads of the best class have been reduced to a few well-defined types, through more than a century of experience in England, France, Germany, and on this Continent. The true macadam road has a well-defined and crowned earth sub-grade, over which is spread a uniform coating of finely broken stone of about 2½ inches diameter. The Telford road has a foundation of flat quarry stones, placed by hand, on edge, the angular points being chipped off by hammer and wedged into the interstices: and over all is spread a coating of finely broken stone, in thickness about one-third of the total depth of the stone surface. The

earth sub-grade is flat and larger stones are used at the center of the road, with smaller at the sides, to give the desired camber. The roads built by Tresaguet in France, were substantially the same as the Telford road and are usually included with it. In the former, the sub-grade was cambered, and the foundation stones of uniform depth. A distinct type of foundation is that developed in Massachusetts in which there is a slightly V-shaped sub-grade with a filling of cobble or field stone, a method which is claimed to give more effectively than other types, a desirable underdrainage.

Experience has shown the superiority of roads with a foundation, such as the Telford type, in reducing the cost of maintenance under heavy traffic. Settlement is more uniform, and defective drainage is less destructive. If the natural sub-soil is strongly supporting, such as a dry, well-cemented gravel, the foundation may be omitted with saving of cost. Whether the Telford or Massachusetts type of foundation be followed, the local material suitable for either should largely govern.



GRAVEL ROAD IN ELMA TOWNSHIP, COUNTY OF PERTH.

Formerly a winding road, was graded, straightened and surfaced with gravel and broken stone. The stumps in piles at the side were taken from the roadbed.

The width of roadway between gutters or drains, and the width of stone should be guided by the amount and character of traffic, and should ordinarily be less in strictly rural districts, increasing as roads converge into city streets. A minimum width of grade for trunk roads should be 24 feet with metal in the central 12 feet, and earth or gravel shoulders six feet wide on each side. Maintaining shoulders at six feet, and a maximum width of metal at eighteen feet, the maximum width of grade need not exceed thirty feet.

The camber on roads of heavy travel should be the least possible, consistent with good surface drainage, factors to be considered being the quality of road metal, class of binder, and gradient of the road. As is well known, roads with a sharp crown encourage travel in one central line of wheel-tracks, while a flatter surface permits more uniform wear.

A hard rock such as trap, or a bituminous binder, requires less camber than soft material and an inferior binder, while a steep grade requires an increased camber to drain the wheel tracks. Trunk roads of the best class may be given an average crown of one-third or one-half an inch per foot from center to gutter.

County or Main Market Roads.

Roads of this class cannot as a rule follow closely English, French, German, or other standard, but must be built with a view to the particular needs of this continent, and of the locality. The immediate need is a long mileage, to be built as rapidly as possible, through districts where population is comparatively sparse, often where there may be little or no road-making material, and the available expenditure necessarily restricted by these and other conditions.

European engineers, would undoubtedly, if it were possible to reconstruct many of their roads, lay them with foundations, but the cost is prohibitive. No more is it practicable on this continent to build any but the most heavily travelled roads with expensive foundation. Instead, it is necessary to depend on good drainage, carefully maintained to keep the sub-soil dry and strong enough to sustain the road surface.



ROAD IN LENNOX AND ADDINGTON COUNTY, TOWNSHIP OF CAMDEN.

Road-beds should have sufficient drainage for the severest test, which in northern countries is that period of thaw in the early spring, lasting usually for two or three weeks: just as bridges have to be strong enough for the maximum load, and with waterway enough for the maximum freshet. If sub-soil drainage is sufficient for the test of spring, no break-up of the road crust need be feared at other seasons.

Old specifications for roads built before the period of railway construction in Ontario, required open drains on each side of the road, with bottom at least two feet below the crown of the road. In most cases the drain was deeper: and hills or spouty places were under-drained with trenches filled with field stone. Such roads have stood the test of time, and may be accepted as the standard of drainage required for the north: except that tile under-drains are taking the place of open ditches where they would otherwise be dangerous, unsightly or difficult to maintain. Drains of porous farm tile keep the sub-soil at its driest and prevent uneven settlement of the road crust into mud which is as destructive to a road when below

the surface as when on the surface. Some counties of Ontario are using tile drains the full length of all their roads. Others use them only on wet and spouty hills; on level land which is exceptionally wet and retentive; and where the open drain would otherwise have to be dangerously deep to give sufficient fall and outlet. In the last case, the tile may carry some surface drainage, receiving it in catch-basins.

Closely associated with drainage is the grading of the road. Before a road is surfaced it should be brought to grades that ensure permanence. Hills should be cut down, low places filled, and the earth work brought to a substantial turn-pike. The road surface will need renewal, but the grade, if properly made, will outlast even the bond issue. On roads of a secondary class elaborate surveys are unnecessary. A good foreman can obtain easy flowing gradients by grading from point-to-point, and would probably disregard stakes and profiles except in cases of extensive cuts and fills, new locations, tile drains, or doubtful surface drainage, which should always be staked by an engineer.

Roads laid on an earth foundation should be given a higher crown when newly constructed, than is desirable for perfect condition. Settlement will assuredly occur, and unless the road is too high to begin with it will become too flat. A road of a secondary class which in two or three years has settled to the desirable camber will give the greatest degree of durability, with least expense for maintenance. One inch to the foot from centre to gutter or edge of shoulder, for a completed, rolled road, will meet ordinary conditions; with a circular cross-section, the greatest part of the fall is on the earth shoulders.

The cost of a road, unless earthwork and drainage is of an exceptional kind, will depend on the width and depth of broken stone used. Wide flat roads are desirable, but narrow roads with a good camber cost less to build, and much less to maintain, unless a highly organized system of maintenance is created. For this class of road and earth grade twenty-four feet wide, shoulder to shoulder, will meet most conditions; but may be reduced to eighteen or twenty feet for least traffic. With shoulders six feet wide, the stone is put on from eight to twelve feet wide.

The consolidated depth of metal on roads is based on 8 inches for a moderately strong clay or sand sub-soil. This is modified according to the anticipated amount of traffic and quality of stone to resist wear; the maximum concentrated wheel loads; local tire widths and wheel diameters; bond of road metal and consequent distributing effect of the stone crust; the supporting strength of the sub-grade and opportunity for drainage.

Bituminous binders may be justified on heavily travelled suburban or motor roads of this class, but present practice in Canada tends to oiling as a preservative and dust preventive, owing to the less first cost of water bound macadam.

Township Roads.

Reduction of cost to meet township conditions requires that townships have as their ideal, the cheaper class of roads adaptable for main county roads. Grading is cheap, and should be perfected before metal is applied. Neglect to provide easy flowing gradients, and to sufficiently drain and turnpike are mistakes fatal to any road. Minor municipalities can make no mistake in creating the perfect earth road as their ideal base for such metal surfacing as their resources will permit. An earth-grade from eighteen to twenty-four feet shoulder to shoulder should be made, and a single track laid eight feet wide, of gravel or broken stone.

Binder.

The durability of a road is largely dependent on the binder, and the cementing qualities of the stone dust, in producing a water-proof surface, —if tar, asphalt, rocmac or other special binder is not used. Stone screenings are more preferable than sand. Very rarely can gravel or sand, sufficiently clean, coarse and sharp be found to make a binder equal to limestone screenings. The superior cementing qualities of limestone, make it a better road metal than its degree of toughness would justify. Limestone screenings are also exceedingly useful with water washed gravel, or with broken granite or trap, all of which are deficient in good bonding qualities.

Coursing Stone.

A uniform grade of stone, rather fine, is desirable in finishing the surface of a road, and is necessary where a very hard stone such as trap is employed; but this may be sought at considerably increased cost, and is not always necessary to suitable



ROAD IN MCGILLIVRAY TOWNSHIP, COUNTY OF MIDDLESEX.

results. It adds to the cost of a road to spread the stone in several layers. Municipalities using portable crushers particularly, will find a rotary screen with two sizes of mesh very satisfactory. This will produce, (1) "Tailings," or the stone too large to pass through the screen; (2) The middle course, a uniform grade to form the main body of the road; and (3) screenings to bond and finish the surface. The tailings should be spread in the bottom of the road, and covered to the required depth with the uniform grade; and this, after rolling, may be lightly coated with screenings and rolled. If a very tough stone such as trap, the screenings may be such as will pass a one-half inch mesh, or a one-inch mesh if limestone; and the uniform grade of stone may be two inches for trap, and two and one-half or three inches for limestone, with the screenings removed. Crushing and handling are cheapened by this system, and for water-bound roads, a smooth surface results.

Trap or other tough rock brought from a distance by rail in preference to the use of soft local material, is justifiable for surfacing heavily travelled main roads; but it is a safe rule, if applied with discretion, that local material if it exists, should be used.

Gravel Roads.

Gravel in general is inferior to broken stone as a road material, but if of a reasonable quality, is suitable for township roads, and for many county roads but, unless of exceptional quality, is deficient for extremely heavy traffic. The rounded pebbles do not take the mechanical clasp that pertains to fragments of broken stone, while the sand which it usually contains is not equal to stone screenings as a binder. It may contain lime or iron, improving its bonding qualities, but as a rule it is not water-proof, and ruts readily in wet weather, especially if it contains sand, clay or loam in excess.

The best quality of gravel is of varying sized grain up to 2 inches in greatest dimension, with only sufficient fine material to fill the voids between pebbles. It should be clean and made up largely of a uniform grade of pebbles—qualities rarely found in natural pit gravel. Gravel pits containing a mass of large stones and boulders should be treated as rock, and put through a crusher. Gravel which is not coarse, but which is "dirty" or contains fine sand, should be screened to remove the excess of sand or clay. A rotary screen may be used, operated by steam power. The gravel can be drawn in wagons to an elevated platform, dumped into a hopper from which it passes through the rotary screen, and from the screen to an elevated bin, from which the screened gravel is again loaded into wagons to be taken to the road. By means of the elevated bins the expense of shovelling into wagons is saved, the time of teams and teamsters is saved, and a well arranged plant will, under favourable circumstances, pay for crushing and screening. This is particularly the case if a pit near the work can be used rather than to team better material a long distance.

Methods.

The methods of construction will largely determine the cost. Machine work is cheaper than manual labor. The cross-section adopted should, therefore, permit the maximum amount of machine construction. Particularly for the cheaper class of roads, the grading machine, in treating with old locations, should do most of the earthwork, supplemented with wheeled and drag scrapers. A cheap and good plan is to make the earth sub-grade, shoulder to shoulder between ditches, almost flat, or with a central rise of about three inches for a 24 foot grade. When this is rolled, the stone is spread to the desired width in the centre, then with the grading machine, earth is drawn from the shoulders to support the stone, thus completing the camber. The stone is first rolled dry to level and partly compact the surface, the screenings are then spread, sprinkled and rolled till consolidated. To grade the road and then excavate a central channel to receive the metal is a more expensive method, and is apt. for roads without a foundation, to place the stone too low for good drainage, producing what may be termed a "water-logged" road. Instead of the camber and turnpike being high enough to allow for settlement, it is apt to be made too low and flat.

Rolling.

As distinguished from earlier road making, modern construction has been largely influenced by machinery, especially grading machines, rock crushers, and road rollers. The smaller municipalities of Canada commonly use graders and crushers, but the purchase of a steam roller is too often delayed. It is to be pointed out that the cost of a roller is by no means an additional expense, since

rolling effects economy in several ways. Coarser stone can be used in a road that is rolled, so that the cost of crushing is reduced. With coarser stone, the road is stronger to resist wear, and is more securely bonded than if first rutted and mixed with mud. Less stone is required in a rolled road, as loose stone is largely forced down into the mud before the surface becomes waterproof, or is knocked to the ditches by traffic. Without rolling, roads demand attention for one or two years, to rake the stone to place from time to time; the earth shoulders have to be restored and levelled where cut up and destroyed by traffic, new material has to be added to



ON A PRINCE EDWARD COUNTY ROAD—AMELIASBURG TOWNSHIP, NEAR CONSECON
Placing crushed stone and rolling.

fill hollows and ruts. By rolling the sub-grade, the wet or weak spots are developed, which can be drained or filled with earth and again rolled to produce a uniform foundation; thereby reducing the stone which the road would otherwise absorb. Long lines of loose stone left for traffic to consolidate are a most objectionable obstruction to travel, and bring road-building into disrepute. On the other hand, a road built with a heavy roller is a complete work, in perfect condition when finished. Rolled roads are a revelation to those who have been accustomed to and who expect only old-time methods and results. For both economy, service, and to popularize the work, rolling should be regarded as essential for every class of gravel and stone roads.

ROAD METAL.

Road metal, in the construction of macadam and gravel roads, serves three important purposes. It distributes the concentrated wheel load over a greater area of sub-soil; it forms a water-proof covering to protect the sub-soil from the softening effects of moisture; it forms a hard and durable wearing surface. The depth of material used, the method of placing it on the roadway, and the quality of materials used, should be proportionate to the three main factors stated. The concentrated wheel load controls largely the depth of material to be used; the necessity of having a water-proof coat emphasizes particularly the method of placing the road metal; and the need for a hard and durable covering is met principally by the quality of stone selected.

The foregoing rule is general, and while a greater depth of material makes a more water-proof surface, and will wear longer than will a thin coat; and while certain qualities of stone have better binding qualities, are more water-proof and will distribute the load at a wider angle, yet in a broad way the three requirements are responded to in the manner stated, viz. distributing power—depth of material; water-proofing—method of applying; durability under wear—quality of material.

Distributing Power—Depth of Material.

When a wagon carries in all two tons, it is apparent that each wheel places on the roadway, along a line which is the width of the wagon tire, a load of 1,000 pounds; if the wagon and its load weigh four tons, the concentrated load on a line the width of the wagon tire is 2,000 pounds. This may be assumed to be communicated to the roadway through a single cube of stone 2 inches square.

Experience shows that from this cube on a well consolidated roadway, the weight is distributed at an angle of about 45 degrees; and it may be shown that the area of sub-soil over which the load is distributed, is equal to a square the side of which is twice the depth of the stone.

The supporting power of soil may be instanced by an extract from the Ontario Standard Specifications for Concrete Bridges, in which the bearing strength of soils, under foundations, is stated as follows:

Rock in thick beds	25 tons per square foot
Strong gravel and coarse sand, dry	8 tons per square foot
Compact sand or firm clay, dry	4 tons per square foot
Clay, moderately dry	2 tons per square foot
Clean, dry sand, not cemented	2 tons per square foot
Wet clay	1 ton per square foot
Quicksand and wet, yielding soils.....	0 to ½ ton per square foot

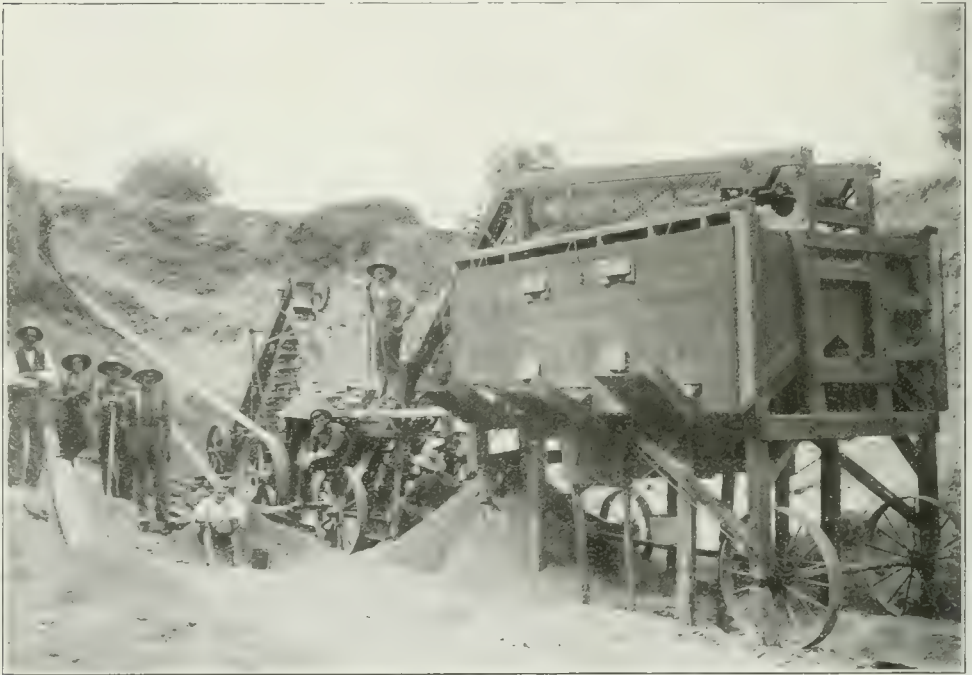
While the foregoing may be accepted as a safe guide for the depth of stone under heavy foundations, yet underneath a roadway, in which the protection from moisture is always insecure, safe loads under the macadam should not, with a proper factor of safety, be taken as exceeding one-half the amount stated.

From this analysis of the case, the importance of thoroughly draining the sub-soil becomes apparent; particularly with a view to securing the greatest possible strength of soil at the time of greatest danger, which is during the spring thaws and freshets. It becomes apparent also why 4 inches of stone placed

on a strong, dry, gravel sub-soil may be as effective and durable as 12 inches of stone placed over a wet, slippery and poorly drained clay; and why a Telford or other strong foundation is at times essential over such a clay, and over a soft and marshy sub-soil. It explains why, in a given mile of road, the depth of stone and character of foundation may be varied half a dozen times to secure a roadway of uniform strength throughout the entire length.

Waterproofing—Method of Placing Stone.

A waterproof covering is one of the important features of a good macadam road, and this is largely obtained by the method of placing the stone. This requires a certain depth of material, not less than four inches on the strongest sub-soil, sufficient bonding material, which in waterbound macadam should be stone



GRAVEL TREATMENT IN MIDDLESEX COUNTY.

The pit gravel is screened to remove excess of sand and earthy material, coarse stone is crushed, and the several sizes are deposited in the bin to be loaded into wagons. The traction engine operating the plant does not show in the picture. A loader into which the gravel is shovelled, feeds to the crusher.

screenings; thorough consolidation by rolling, and a proper camber to shed water to the side gutters or drains.

The depth of metal must in the first instance be proportioned to the strength of sub-soil and the concentrated wheel load, but a minimum depth of four inches is essential as that is the least depth that can be properly bonded by rolling.

Loose broken stone has about 50 per cent. of voids. If laid loosely on the road, without rolling and bonding, it will not shed water; but is merely a sieve through which rain and melting snow pass. The sub-soil is at once softened by moisture, and into this mud, the broken stone is forced by traffic, rutting the road

and wasting the stone. To prevent this condition, sufficient fine material should be used in the road to fill the voids for some depth from the surface, and then rolled to thoroughly bond the stone, leaving a smooth water-tight surface from which rain is at once shed to the gutters.

Rolling takes an important place in making a water-tight surface. If not rolled, much damage to the road results before the metal becomes bonded by traffic, a considerable amount of the loose stone is driven into the mud and is largely wasted. Many gravel and stone roads in Ontario have had two or three feet of metal placed on them and forced into the mud in this way. With the voids filled with earth, the stone is of little use other than to strengthen the foundation in an inferior way. Economical construction requires a road crust of well-bonded stone laid in a well defined and uniform layer.

The camber of the road surface should be in keeping with the quality of the stone, and methods of construction. An average crown of one inch to the foot from side to center is often specified, and this applies to the class of road ordinarily built in Ontario. This will provide for some settlement after construction. Except in the most expensive type of construction a new road should be given a crown that is too high, otherwise it will soon become too flat under traffic. It follows that in maintenance, the surface should be kept smooth and free from ruts and wheel-tracks in order that the flow of water from the surface will be immediate, and that none will have time to soak into the road.

Broken stone should be separated into grades according to size, the coarser stone to be placed in the bottom of the road and the finer at the top. This grading of stone is done by means of a rotary screen attached to the crusher. If the stone is placed in the road without being graded in this manner, the smaller stones wear away more rapidly than the larger, and a rough surface results. Large stones at the surface, moreover, are more apt to become loose, to roll under the horses' feet or the wheels.

For common country roads using limestone, there should be placed in the roadbed:

(a) In the bottom a layer of stones such as are refused by a $2\frac{1}{2}$ inch or 3 inch ring—"tailings."

(b) On this a coating of stones such as will pass through a $2\frac{1}{2}$ inch or 3 inch ring.

(c) On this a sprinkling of screenings—that is, the dust and chips created in crushing, and including all that passes a 1 inch screen.

Course (c) should be only a thin covering, not more than enough to bond the stone when rolled. The main body of the road should be made of the grade (b).

Durability under Wear—Quality of Stone

The important properties of a good stone for roadmaking are (1) hardness, (2) toughness, (3) cementing properties, (4) and resistance to atmospheric action, including low absorptive qualities.

A stone may be very hard, and yet very brittle, so that toughness as well as hardness is necessary. A stone the dust of which will cement strongly, and re-cement when broken, makes a smoother and more waterproof road, and also

which will distribute a concentrated wheel load at a wider angle. For this reason limestone, because of its cementing properties, is less inferior road metal than its softness would indicate. And some rocks, when first quarried, are hard and tough, yet through atmospheric action, decay rapidly. Rocks which absorb a large percentage of moisture are generally acted upon in this way by the combined action of moisture and frost. Low absorption is therefore desirable; and this is generally indicated by the weight of the stone, the heavier stone being more desirable in this respect.

The quality of stone is not a matter of name, as varieties of the same kind and even from the same quarry may differ greatly. Those who are familiar with limestone quarries know the great variation in hardness and toughness, between adjacent strata.

All things considered, the relative desirability of rocks available in Ontario for roadmaking may be placed in about the following order: (1) Trap; (2) Syenite; (3) Granite; (4) Limestone; (5) Schist; (6) Gneiss; (7) Quartzite; (8) Sandstone; (9) Slate; (10) Mica Schist; (11) Marble.

The name "trap," is one of very general application, and is usually applied to the black and green stones which, found in the fields, are known as "nigger-heads" and "hard-heads." For some years, this material has been quarried at Georgian Bay, and shipped to cities in the United States. In older Ontario, the most convenient point at which it occurs is near Havelock, in Peterboro County, on the C. P. R. While trap is a most durable stone, yet consideration of economy and first cost will generally dictate the use of a softer and less durable stone of the locality in which the road is being built.

Throughout Western Ontario, limestone is common, and the greater mileage of roads is now being constructed of that material, since quarries are within easy access of almost any part of the Province. Limestone ranges in quality from that which is very soft and decays rapidly, to that which is very tough, with strong cementing properties. If tough and close-grained, it is an excellent material for roads on which the amount of traffic is not excessive. In some parts of Eastern Ontario, granite, gneiss and schist are being used, and are proving very suitable. Granite is a harder and tougher stone than limestone, but its cementing properties are inferior; and a good practice when granite is employed, is to use limestone screenings to surface and bond the road.

Field stones are frequently used. Picked up from the fields, they are usually found to consist of fragments of trap, granite, gneiss, limestone, sandstone, and other varieties. Owing to lack of uniformity, the serious deficiency of this material is that the softer stones wear more rapidly than the others, and in consequence, a rougher surface is ultimately produced under traffic. Field stone, however, forms a good source of supply for road metal, and if obtainable in the locality, should generally be used in preference to stone shipped in by rail.

Reliable tests of roadmaking material have been devised, relating to crushing strength, degree of toughness, degree of hardness, cementing properties; and absorption, indicated by weight or specific gravity. No test is so conclusive, however, as actual wear on the road, and old roads in the locality may be instructive.

Simple tests may also be applied. We may judge of the qualities of a stone by breaking with a hammer, wearing on a grindstone, crushing it in a blacksmith's vise, scratching with an iron nail, breaking small pieces with the fingers.

A heavy stone is usually better than one that is light. A stone that breaks into cubical shapes is desirable, whilst one that breaks into thin, flat shapes is objectionable.

As previously suggested, the stone of the locality in which the road is being constructed should generally be used. Freight rates and additional cost of handling, will often add 50 per cent. to the cost of a road, as compared to the cost of a road made of stone obtained in the vicinity. It is usually better to accept an inferior stone, and resurface more frequently, than to pay freight rates on a more durable stone shipped in from a distance. This, however, will depend somewhat on traffic, and where travel is extremely heavy or constant, it may be in the interest of economy to pay freight rates for the more durable material. At times it is good practice to use soft material of the locality for the foundation of the road, and surface it with a tougher and more durable material, placing about 4 inches of the latter material on the surface.

HIGHWAY BRIDGES AND CULVERTS.

Highway bridges and culverts, in design, methods of construction and supervision, and economic features, form an important and interesting department of highway engineering. Technical skill and training of a high order are involved, originality and inventive power may be freely drawn upon, and on occasion, the results may be monumental to the designer.

The distinction between a bridge and a culvert is not, in the writer's experience, clearly defined. A bridge is commonly associated with a crossing *over* a living stream, while a culvert suggests an artificial channel or drain *through* or under an embankment, length of span and design being distinctive features. The number of bridges of 50 feet and upwards is usually very limited, as compared with culverts or bridges of 10 feet or less, which are innumerable. In ordinarily rolling country every mile may have from one to a dozen or more culverts. Bridges are over the few larger streams only, into which the many small watercourses converge. While each bridge of fifty feet span may cost as much as one or two



HANLON'S BRIDGE, COUNTY OF LEEDS AND GRENVILLE.
A steel warren truss with concrete floor.

dozen culverts, yet the larger number of culverts to be maintained, makes them, in the aggregate, an important item of expenditure and often much more than a municipality's total outlay for larger structures. Culverts or short bridges are, therefore, from the standpoint of cost, as deserving of careful attention as are the longer structures.

An elemental form of bridge consists of two wooden beams laid across a stream, and supporting a plank floor. To obtain greater strength than simple beams will give, it is necessary to replace them with trusses or an arch. The simplest form of truss is a single triangle, the sides of which are stiff, straight members fastened at each angle, the inherent property of such a shape being that, unlike a figure of four or more sides, it is of rigid and unalterable form. A bridge truss, as ordinarily understood, is a framed structure, made up of a series of triangles so connected as to act as a single body. An arch, instead of a single horizontal beam across a stream, may be compared to a series of inclined beams so arranged under loading as to convert the bending stresses into compressive stresses.

General Types of Bridges.

The general types of steel bridges preferred under the standard specifications of Ontario are:

- (1) Rolled beams for spans up to 35 feet.
- (2) Riveted low trusses or girders for spans of 35 to 90 feet.
- (3) Riveted high trusses for spans of 90 feet to 250 feet.
- (4) Pin-connected or riveted trusses with inclined chords for spans of 200 to 300 feet.

Deck spans are preferred wherever suitable, and Warren and Pratt trusses are favorably considered for spans of 35 to 200 feet; and Petit trusses for bridges over 200 feet in length.

The foregoing limiting lengths and types are not absolute, but may be varied. The design is in all cases to be such that the stresses in essential members and their connections can be fully determined. Solid concrete abutments, wing walls and piers have practically superseded stone, timber or other substructure for ordinary steel bridges.

Concrete superstructures may be classified as follows:—

(a) A simple concrete slab with or without steel reinforcements, on solid concrete walls. This style of structure is very useful for spans up to 18 feet, and may have a suitable hand-rail of concrete, steel lattice or gas-pipe.

(b) A flat concrete or floor, carried on concrete beams; the latter, as well as the floor, being reinforced with steel. This type of bridge has been commonly used for spans up to 40 and 50 feet.

(c) Heavy concrete beams on each side (resembling strong hand-rails) with a floor system of reinforced cross-beams and concrete covering. This type of bridge is suitable for spans of 40 and 50 feet and is better adapted to a higher head-room than is class (b).

(d) A concrete arch with or without steel reinforcement for spans of any length, but commonly up to 100 or 125 feet. Spandrels may be open or closed. This type of bridge is one of the most beautiful that can be erected for long or short spans. It is economical of material, but requires a strong and unyielding foundation as settlement of the abutments is likely to cause failure of the bridge.

(e) Structures other than arches for longer spans than those indicated in classes (a), (b) and (c) may be carried on viaduct posts or bents.

Selection of the type of bridge for any particular site on a rural highway, commonly requires a choice between a concrete structure, plain or reinforced, and a steel bridge on concrete abutments, with plank or concrete floor, cost being largely a determining factor, together with area of waterway, flood resistance, length of span, and availability of materials, etc.

Concrete bridges of shorter span, have, in matter of initial cost, entered into successful competition with steel trusses for many situations, and with their great durability and low cost of maintenance, are a cheap and desirable structure.

Architectural Treatment of Concrete.

The present is notably a bridge-building period on this continent. A vast number of wooden structures are falling to decay, and are being replaced with concrete, stone and steel, materials which will last for decades, some for centuries. It should be matter of concern, that these permanent bridges possess architectural merit, such as will, in their appearance, give pleasure to the present users, and which will impress, as we would wish, the generation to follow.

Good architecture has always been a matter of pride to advanced and progressive nations. To this class of construction bridges belong. With splendid cathedrals, public buildings and palatial homes, they have in all ages excited interest and admiration. Many bridges, for their importance, strength and architectural beauty, have been, and are, world famous. A bridge is a prominent part of the highway, subject to special observation from the public. Bridges may in design and construction harmonize with a fine landscape, or may produce discord in a scene of beauty.

Little consideration has been given to the artistic side of bridge construction by municipal authorities having charge of the erection of bridges. It is taken for granted that questions of cost, economy, and utility are of too pressing a character in this comparatively new country to permit any thought of the ornamental. We



CONCRETE ARCH, AT FERGUS, COUNTY OF WELLINGTON.

The rock formation is especially adapted to this type of construction.

are learning, however, that scenery and a good appearance in any field, are an asset of value.

It is fortunate that good design and good construction for strength and permanence possess in themselves, the chief elements of beauty, so that the results have been more harmonious than past efforts to that end would themselves produce. Nothing will accord with the ordinary landscape more perfectly than a well built arch of stone masonry, however simple in design. Arches of concrete on the highway are very much of the same class. A well built bridge, composed of stone or concrete abutments with steel superstructure, may also accord with a landscape without especial consideration having been given to ornamentation. Much could be gained if more attention were paid to the appearance of these structures, but it is very easy to run to the opposite extreme with tawdry results. It is a short step from ornamental construction to constructed ornamentation—the latter a very unsatisfactory substitute for strict simplicity.

Concrete is a material which lends itself to easy manipulation, and much can be done by moulding it into graceful outlines. In doing this there should be no attempt at imitating other materials. The imitation of rock-faced stone so often seen in concrete blocks is extremely crude. Fussy ornamentation should be avoided. Concrete lends itself to distinctive and original treatment in the direction of panelings, mouldings, and graceful outlines, based on proper methods of construction.

Engineers can profitably study architectural design, particularly as instanced by the finer stone and concrete bridges of Europe. Architectural details and proportions are too frequently overlooked. The proportioning of hand rail to the size of bridge should be carefully considered. Coping courses of arches should be sufficiently prominent, and should be slightly arched, otherwise they will appear concave. Wing walls should if possible be curved to give a greater appearance of strength. The spacing and placing of ballusters in the parapet, and their design, will add or detract from the merits of the bridges. Wing walls and posts should widen at the entrance to the bridge, as posts or railings standing squarely on the roadway are not ornamental.

Very handsome structures may be had by making the arch ring of concrete, facing the sides and abutments with stone, and using stone for portions of hand-rails and posts. Grey stone posts alone harmonize with the concrete in the remainder of the bridge, and are ornamental. Posts of concrete too often develop hair-cracks and surface blemishes which take much from the appearance of the bridge; whereas stone is less liable to defects, or if they arise are less objectionable.

Hand-rails of short concrete bridges are important. The public driving on the road see little of the bridge except the rail, and if it is strong and of good appearance, feel assured of the safety and good quality of the entire structure. It is desirable in such short-span bridges to extend and slightly curve the wing walls, carrying them to the top of the roadway and putting a hand-rail along the full length. For a small additional expenditure an impressive structure can be had, where the results would otherwise be commonplace if not ugly.

The semi-circular arch is strong and easily formed, but requires a headroom for rise equal to half the span. An elliptical arch, or one approaching that form, has a better appearance, requires less head-room, and is adapted to situations where little rise can be obtained. Arches should, where possible, have a rise of not less than one-fifth of the span. Where elliptical arches are used, an exact ellipse is not usually employed, but an approximation with three or five curves is generally used. For best appearance much care should be taken to see that the several curves are centered from common radii, entering one another on common tangents, and that the end curves join the abutments on a vertical tangent. Careful design, showing precise dimensions, to be followed by the carpenters in making the wooden centers and forms, will avoid awkward and disfiguring workmanship.

The failure of concrete hand-rails has often occurred through neglect of temperature stresses. Open rails should be broken into lengths of 8 or 10 feet, given expansion joints and the ends of each span supported on a solid post. Between the posts, ballusters of various types may be used. The writer has seen a bridge of over 100 feet length in which much attention was given to appearance, but the hand-rails were not given expansion joints, and every concrete balluster in the rail had been sheared. Concrete railings can be very cheaply made, if designed with ease of workmanship in view, and are vastly superior to the weak and rusting gas-pipe rails which disfigure so many concrete bridges.

A common fault in short span country bridges and culverts is in that they are too short, with insufficient width of roadway. As a rule it will be found as cheap to carry tile entirely across the road, using lower head walls and widening the fill, than to use a shorter length of tile with necessarily higher and longer head walls to retain the earth fill. The clear width of roadway for short span bridges on country roads should ordinarily be at least 20 feet, as narrower bridges have an element of danger, and, in appearance, are an obstruction to, rather than a continuation of the roadway.

Surface treatment of concrete is important. The surface should be a part of the concrete itself. A mere plastering of a defective surface will not permanently remedy defects. In securing a good finish, the framework should be dressed and closely fitted, oiled and kept clean. The concrete mixture should be wet, should contain sufficient sand, and should be carefully spaded against the form work, so as to avoid air holes and cavities. A good finish can be obtained by using red granite in the surface mixture, this to be treated with acid or brushed with wire before the concrete has fully set. This treatment is not practicable except for special work, but in all cases a smooth and close grained surface can be obtained by using sufficient care. The practice of making the exposed surface of stronger concrete is good, and is readily accomplished by carrying up a board a few inches inside the surface to retain the core concrete until it is partially set, when the board can be removed and the surface concrete put in place. The marking or moulding of concrete to imitate stone or other material is never a success. Concrete is a strong and durable material, capable of good treatment, and should frankly stand on its honest merits.

Life of Bridges.

A covered timber bridge with heavy oak stringers, erected at Napanee, Ontario, in 1840, was replaced by a steel structure in 1910, after a life of seventy years. Many wooden bridges with covered trusses, have been in use for twenty-five years. The ordinary wooden truss bridge or culvert as now built, rarely lasts more than ten years. Lumber now obtainable is inferior, the price constantly advancing, and workmanship is less reliable. Repairs are needed every year, and the cost of these, in sending men and material for necessary details of maintenance, such as putting in a new stringer, plank or post, very soon runs up a bill equal to the original cost of the bridge.

On old turnpikes built in stage-coaching days, the remains of many very fine stone arches are to be found, but in the neglect which accompanied the era of steam railway building, these old structures, without pointing, have in many cases fallen to ruins. Within the writer's experience, wooden bridges and stone arches are, with minor exceptions, giving place to steel and concrete, and modern bridge building involves almost wholly a consideration of the latter materials.

Structural steel as now used is practically a new material. It is little more than ten years since it has wholly superseded wrought iron. No structural steel highway bridges have been erected long enough to fully determine their life. In any event, their life is dependent upon the quality of the bridge and careful maintenance. Light or otherwise inferior structures, put up by incompetent makers, have failed within a year, or have required stiffening and strengthening.

While the life of steel bridges has not been fully indicated by experience, yet present knowledge would indicate that, for ordinary highway service, with proper strength of construction and subsequent attention, they may be expected to last from forty to fifty years. Under railway traffic the life is short as the strain is greater, and the corrosive effect of coal smoke is very destructive. Steel bridges require attention to maintenance in the matter of painting, tightening, putting in new rivets, but this can be done periodically, and in a comprehensive manner, so that the cost of repair is not made up of time wasted in going to and from the work with men and material for trifling defects, as with timber. By using steel stringers, concrete floors, and concrete abutments, a large measure of durability is attained.

The ordinary life of a concrete bridge is as yet not known. Much will depend on the design and workmanship. Many poorly designed structures may have to be replaced after very limited service; but granted good design and workmanship, it is difficult to see why a bridge of that material should not endure for centuries, nor is there reason to doubt the great durability of steel reinforcement, provided the steel is properly protected, and the designer has not placed too great reliance upon it in caring for tensile stress.



THE PLAINS ROAD IN NELSON TOWNSHIP, COUNTY OF HALTON.
Graded, surfaced with broken stone, and rolled.

Traffic and Loading.

The traffic which bridges are required to carry has been greatly increased in recent years, and still heavier loading may be anticipated. Traction engines of six or eight tons with threshing outfits are the greatest concentrated load which many bridges now carry, but with the improvement of roads, and concurrent growth of motor traction, rural highways, especially those carrying inter-urban traffic, must be designed for heavier loads. A motor truck itself weighing six tons, is capable of carrying an equal load or twelve tons in all, two-thirds of which is concentrated on the rear axles. Each wheel thus carries four tons, a load which floor systems should be designed to support. In England inter-urban traffic shows instances of steam trucks with loads aggregating forty tons in weight.

Shop Inspection of Steel.

Shop inspection is important for all steel bridges. The engineer employed by a municipality could rarely do this personally, but can employ an inspection company. Inspection companies make a specialty of this work and the charge is usually small, about fifty cents per ton of steel.

When steel reaches a bridge company's works from the rolling mills, it is usually piled in an open stock yard where, for a period of storage, it is exposed to the weather. When required for a bridge it is taken into the shop, and the first operation should be to run the plates and flats through horizontal rollers to straighten them. Wooden cardboard templets, previously prepared in the templet department, are then laid on the steel and rivet holes and other dimensions are marked off, after which the steel is taken to the shears, coping machine or punches. The steel should be again straightened if necessary to remove distortion created in punching or shearing, and contact surfaces given a coat of paint. Angles and plates are then assembled to form the various members, placed on the riveting horses or skids, and riveted together. The members, as completed, are given to the painters, to receive a shop coat of paint. When it is specified that field connections are to be shop assembled and reamed, the truss is laid out flat, each member in proper position, the required camber is produced by opening or closing splice joints of the bottom chord, and the field connections are then reamed out. The several members are then match-marked for field erection, and are ready for shipment.

Throughout this process are many points for which careful shop inspection should be provided. Some bridge companies paint their stock as soon as received from the rolling mills, while others do not. Material which has been in stock for a considerable period, and unprotected, and has become pitted and corroded, should be rejected. It should be seen that material is properly straightened when taken from the stock yard for fabrication, a rolling operation which is omitted in some bridge shops. Templets should be checked over to see that they are correct and according to the plans. They should be made to lie flat on the steel, and without distortion, when the steel is being marked for punching and cutting. In punching rivet holes, special supervision should be given to the punches and dies, to see that they are such as will produce a sharply punched hole, with almost parallel sides, and within the specified clearance. For work of the best class, rivet holes should be punched smaller than necessary, and reamed to the required diameter. If this work is left until the members are assembled, the reaming, in addition to removing the crystallized steel caused by punching, will correct slight inaccuracies, making rivet holes coincide, and permitting a much higher quality of riveting. Workmen dislike to handle steel newly painted, and are apt to neglect the painting of contact surfaces before assembling. Size and shape of rivet heads are largely dependent on the condition of the dies and the latter should be carefully watched; sufficient force should be provided in the case of pneumatic riveters to properly enlarge the shank and produce a full round head. All rivets should be tapped to see that they are tight, and it should be seen that they are in proper alignment. With good riveting equipment, the percentage of bad rivets is very small, but with hand-driven rivets, it may be as great as fifteen per cent., all of which should be removed by order of the inspector.

After riveting, it must be seen that a proper quality of paint is used, not merely a coloring material, and that defects such as open joints, cracks, mis-punched holes and rolling-mill defects are not covered up by paint, paste and putty. To

bring top chord and compression joints into close contact, they should be faced exactly, and at right angles to the axes of the members, by means of a rotary planer. All these are details which large bridge shops are apt to neglect if proper shop inspection is not provided, or for which the smaller shops may not be equipped.

Field Inspection of Steel Bridges.

Field inspection under the engineer should commence with the transportation of the material from the railway to the site of the bridge. Care should be taken to see that the steel is not carelessly handled or piled so as to cause distortion. Long members should not be allowed to project so far behind the wagon as to become bent, and material should not be dumped roughly from the wagon; nor should the steel be allowed to become covered with mud, as there may or may not be difficulty in having it cleaned off before painting. Any material damaged in transit should be rejected when such damage consists of sharp kinks. Slow bends only should be rectified in the field, and in no case should a member be heated for this purpose. The straightening of a built member should not be permitted after the parts have been riveted together.

Falsework should be strong and rigid, and the camber blocking carefully adjusted; without which the several parts will not assemble accurately, and drifting, with distortion of rivet holes will be necessary. Proper alignment of trusses, close contact of compression joints, tightening of tension members, clearance at the expansion end of the bridge, full bearings for steel joists and truss shoe plates are important details to enforce. The inspection of field riveting is exceedingly necessary. Hand-driven rivets can be made as tight and as well formed as shop rivets, but this has usually to be urgently insisted on by the engineer.

Bridge Flooring.

Plank floors on steel bridges commonly wear out in from two to four years, and are a constant matter of expense for repair and renewal. The tendency for bridges under the writer's control, is to use concrete flooring. The latter material, however, is heavy, adds a considerable dead load to the bridge, and largely increases the weight of steel required in the trusses. A problem for frequent consideration by the engineer, arises in determining for a given site, the relative economy of a light steel bridge with wooden floor, or a heavier bridge carrying a concrete floor.

Where traffic is infrequent, and loads will not exceed six or eight tons; where future increase of traffic is improbable, the lighter structure with wooden flooring may give the better service. Where loads approaching that of a ten ton roller will be carried, or where motor truck travel may be anticipated, wooden flooring is not strong enough for the concentrated load, and better results are had from a concrete floor system. For short spans the difference in expenditure is not great, but for spans of great lengths, careful analysis of cost should be made.

Where plank has sufficient strength to carry the traffic, wear may be lessened, decay decreased, and the surface kept in a smoother condition by applying annually a coat of tar, over which is sprinkled a light covering of fine gravel. The practice is very general in England. The tar waterproofs the timber, the creosote oil in the tar is a preservative, the tough tar coating takes up wear, and makes a smoother surface where knots are protruding, thereby lessening vibration.

The solid concrete floor has advantages, in addition to a more durable wearing surface, particularly the extent to which it distributes the concentrated load.

With a plank floor, the weight of every vehicle passing over it is transmitted to the individual members of the bridge, causing a constant jarring and distortion that is very destructive to the joints and connections. With concrete, on the other hand, the weight of a passing vehicle is spread over a greater area of the bridge structure, the floor being a monolith and distributing the live load over a much greater bearing than can each plank. In this way the injury to bridges is much less with a concrete than with a plank floor.

So much is this the case that, with a concrete floor, it is not necessary to restrict the speed of vehicles travelling over it. With a plank floor it is always expected that horses will not be driven over the bridge faster than a walk. But with concrete floors, travel is not interfered with, and horses may be driven at any pace.

Painting Steel Bridges.

Rust is the chief destructive agency of steel highway bridges. Railway bridges are greatly injured by smoke corrosion and the vibration caused by heavy moving loads. Frequent and thorough cleaning and painting are necessary to the preservation of steel highway bridges. If they could be fully protected from rust, steel highway bridges would practically last forever. It is found that painting is required about once in five years; oftener if the bridge is in a much exposed situation by the lake shore or sea coast.

Before painting steel, the surface should be absolutely free from rust, scale, moisture and grease. Rust is removed by scraping with steel scrapers; and scale, by the use of stiff wire brushes, or more efficiently by the use of the sandblast. Rust left beneath the paint will spread, in time the paint will flake off, and the metal is then wholly exposed to the destroying action of air and moisture. As portions of the metal in a bridge are only $\frac{1}{4}$ and $\frac{1}{8}$ of an inch thick, it is evident that rust, acting on both sides, can greatly weaken the structure. Connections, too, require special care, to see that they are fully protected. Bridge companies rarely exercise sufficient care, when erecting a bridge, to see that the scale is fully removed and the bridge properly painted.

The sand blast has recently been applied to the cleaning of steel bridges with excellent results. By this process a current or blast of sharp sand is driven over the surface of the steel under high pneumatic pressure. Properly used, all rust, scale, and loose paint are removed, and the steel left bright and clean, ready to receive a new coat of paint to the best advantage. The sand blast reaches corners, angles and recesses in a much more thorough and effective way than can be done by hand.

The materials commonly used in painting bridges are red lead mixed with linseed oil. All are subject to much adulteration, and care has to be exercised to procure reliable materials. Lampblack added to red lead, will change the color to a rich chocolate, and will not injure the paint. The Standard Specifications of Ontario provide that, while other materials, subject to approval and test, may be used, the paint used shall consist of red lead, lampblack and pure raw linseed oil. The shop coat shall contain 12 pounds of red lead, 8 ounces of lampblack, and one gallon of linseed oil; the first field coat to be 15 pounds of red lead, 10 ounces of lampblack and one gallon of linseed oil; and the final coat to be 15 pounds of red lead, 13 ounces of lamp black and one gallon of linseed oil. Each coat is to be thoroughly dry before the next is applied. The red lead and lamp-black shall first be mixed dry, the linseed oil added, and the mixture stirred to

a uniform consistency, and maintained at such consistency by frequent stirring during application. Only a sufficient quantity for immediate use shall be mixed at once. Thinning and drying ingredients will not be allowed.

Circular Culverts.

Culverts up to three feet in diameter are now being commonly made of concrete tile. When properly made and laid, they are very durable, and, where suitable material is available, of low cost. Where material for concrete is not convenient, corrugated iron culverts are very often well adapted to certain situations.

It is especially necessary that concrete pipes be strongly made, with the materials well mixed, the cement of a good quality, the thickness of concrete ample and proportioned to the diameter, a sufficient covering of earth when laid, and the size of tile large enough for the flow of water.

These culverts should not be made too short, especially at road intersections. It does not cost very much more to make the length ample for safety of the public, preferably the full width of the road allowance.

If good results are to be obtained from the use of concrete tile culverts, the tile must be put in place with reasonable care. It is, in the first place, necessary that they be laid with a good fall on a regular grade to a free outlet, in such a way that water will not stand in them. The tile should be laid with the spigot end down grade, and the joints made tight with cement mortar. If the joints are open, water is likely to work along the outside of the culvert, and finally make a considerable channel, which will allow the culvert to get out of line and finally result in a "cave in." To prevent the water finding its way along the outside of the pipe, the ends should be protected with concrete or stone head walls.

A concave bed should be excavated for the pipe to rest in, thus securing an even bearing, without which a heavy load passing over before the culvert has properly settled into place may burst the tile. Tile cannot be used for very shallow culverts, but must have a sufficient depth of earth covering to protect them from the direct pressure of heavy loads. At least a foot of earth over the top is advisable in every case, but for culverts of two feet in diameter or over, this should be increased to eighteen inches.

The earth should be well packed and rammed around the tile to secure a firm bearing, and light soils should not be used immediately over or around the culvert. A heavy clay, a firm gravel, or a compact sand will answer, but vegetable mould, fine sand and light loams are subject to washouts.

At the outlet, the culvert should be set nearly flush with the surface of the ground. If set higher than the surface, the fall of water will wash out a depression, and in time will undermine the end of the culvert. A too rapid grade will have the same effect, and it is well to cobble-pave an outlet where this undermining action is likely to occur. The diameter should be sufficient to carry the maximum flow likely to occur in a term of years, otherwise a wash-out will sooner or later result.

Concrete Abutments.

The dimensions of a concrete abutment and wing walls are subject to careful analysis, and for all large structures this should be done if safe results with economy are to be assured. They are designed on the principle of a retaining wall, the thickness increasing with their vertical depth from bridge-seat to foundation, according to the height of earth which they must support. Earth pressure

on abutments and wing walls varies not only with the height, but also with the quality of earth; as indicated by the slopes which different soils naturally assume in cuttings. Certain kinds of gravel will stand with an almost vertical face, demanding little support; while plastic clays or quicksands tend to become almost fluid in wet weather, and develop a much greater pressure.

The face of a concrete abutment is usually made vertical, the back being sloped to produce the necessary increase in thickness. This batter, sometimes called a "frost-batter," permits the earth to slide upwards when expanded by frost; whereas if the rear face were vertical, the expanding force would tend solely to overturn or displace the abutment. Whatever earth is behind the abutment is loose for a time, so that the abutment must be designed for the greater pressure of loose, not firmly bedded material. The top of an abutment is largely designed according to the requirements of the bridge seat.

For low, solid concrete abutments, an approximate thickness at any point may be assumed at from 25 per cent. to 40 per cent. of the depth below grade. That is, an abutment ten feet high should have a bottom thickness of from $2\frac{1}{2}$ to 4 feet. The lesser thickness is rarely permissible, 33 1-3 per cent being a safer minimum thickness under favourable earth conditions. A base so determined should usually rest on a footing course one foot in thickness and projecting eight inches from each face of the wall. Wing walls are designed on the same principle as the main walls. The foregoing proportions can be judiciously applied only through full knowledge of earth pressures.

For abutments ten feet or more in height, a saving can usually be effected by using a carefully designed reinforced concrete structure of curtain wall, extended footings and ribs. A large amount of concrete can be replaced by properly spaced steel rods, but more complex form work is required. Steel, even in solid concrete abutments, should generally be used to reinforce the angles joining the wing walls and main abutments.

Concrete Construction.

Concrete bridge construction, while progress may be made in the future, has passed into stages of standard methods, and is no longer experimental in so far as assured results are concerned. Past discussion has centred around the relative values of broken stone and gravel; wet and dry mixtures; methods of mixing, types of reinforcement and other details which now belong to settled practice.

Whatever specification is determined upon, however, should be carried out with intelligence, and in good faith. To this end, capable inspectors are necessary. Carefully drawn plans and specifications are of little value if their interpretation is left to men who have no proper knowledge of the properties of Portland cement and its use. Inspectors should be selected by the engineer, and should be carefully instructed before being placed on the work. Inspectors appointed by Boards of Works and councils, because of their influence, can rarely be expected to develop the skill, interest and enthusiasm that properly belong to the position, and which are essential to best results. The writer has in the past found young engineering students of the second or third year to be in many respects well qualified, while the experience and training is of much value to them and ultimately to the public.

Better results could in many cases be had, were engineers to give more attention to form-work. Too frequently this is left to the rule-of-thumb methods of

the foreman or contractor; whereas it is of vital importance that forms of adequate strength and of exact dimensions be provided if the strength and beauty of the structure is not to be jeopardized. Economy and perfect results will be greatly facilitated by detailed drawings for well-designed centres and forms.

Provision for Cost.

The repair and renewal of small bridges and culverts during the timber or plank period of construction, has, in purely agricultural districts, been a serious drain on municipal resources, but the policy now being adopted of replacing these with concrete or other permanent material is one which, in the near future, promises to relieve taxpayers of this annual expenditure, and permit the outlay to be directed to more necessary road building.

Some municipalities, with commendable desire to avoid public debt, are burdening themselves, and delaying progress, in order that all bridges and culverts may be built by annual levy. Where permanent material is used, construction carried on under proper supervision, and repairs provided for, there is every justification for borrowing money to build bridges of steel or concrete, extending payment over a term of twenty or thirty years. In this way those who benefit hereafter will contribute to the cost, and those who use them to-day are not unduly burdened.

This does not apply (it must be emphasized) to flimsy steel trusses, weak concrete structures, wooden floors and substructures of steel legs, steel tubes and wooden backing; but only to those in which the greatest degree of permanence and strength is provided with a view to future traffic demands. The future users should not be burdened with charges for which they derive no service.

Road building has, in the past, suffered much by this annual demand for culverts and bridges. A decayed bridge, or broken culvert, must of necessity be replaced or repaired, while the road, if at all safe or passable for a part of the year, can wait. It should not be forgotten that, while bridges are necessary, they are only a short part of the highway; are only built because of the highway, and are an unfortunate necessity. Users of the road may pass over a bridge or culvert in ten seconds, while it may take ten minutes or longer to drive over a mile of road. The writer has found many localities in which excellent bridges are being built, but in which the roads proper are in a neglected state. Good bridges should be accompanied by good roads, and every councillor may feel assured that the community which will sanction expenditure for permanent bridges, will with equal good will sanction the cost of good roads when shown a model of what well-directed expenditure will do in that regard.

The Purchase of Bridges.

The purchase of a steel bridge may be made through an engineer or engineering department; or as is very commonly the case, a municipal council or bridge commission carries on negotiations without the services of a qualified engineer.

In the latter case, a common practice is for the council or committee to determine the span of the bridge, and advertise for tenders, stating, perhaps, that the bridge is to comply with certain general specifications, or is to be strong enough to carry a stated load. Representatives of the bridge companies interview the members of the council or the committee, tenders with or without strain sheets

are received, at the appointed time are opened, and the contract is awarded, often on the basis of the lowest tender alone. Under such practice the writer has known a difference of \$5 in the tender to cause a council to authorize a contract for a bridge of \$500 less value, with no guarantee that the bridge would be built even as the tender specified. The services of a competent engineer, costing from 5 per cent to 7 per cent of the price of the bridge, would have doubled the life of the structure and given a much greater assurance of safety to the public.

Councillors cannot be expected to judge as to the qualities of a steel bridge, as they can of timber, with which they are all familiar. For steel and concrete bridges they are fully justified in obtaining proper engineering advice; or rather, a council is not justified in doing otherwise. Steel bridge design requires a mathematical training such as only engineers possess.

An engineer's services in the erection of steel bridges will usually consist of:

(1) The examination and measurement of the site of the bridge, changing the location if advisable, determining the number of spans, material and type of bridge.

(2) Preparation of plans and specifications and taking tenders on a uniform basis for abutments and piers.

(3) The preparation of specifications for the steel superstructure, with such plans as may be required.

(4) Preparation of notice or advertisement calling for tenders for steel superstructure, so arranged that all companies will tender on a uniform basis.

(5) Scrutiny of the plans and tenders submitted by the bridge companies, and advising council as to the most satisfactory.

(6) Such inspection of the bridge during construction as its size and importance may render advisable, and arrangement for shop inspection.

(7) The inspection and final acceptance of the bridge upon completion.

Forms of tender and specifications should always be carefully drawn so that every contractor or company will tender on a uniform basis; and parties tendering should know that construction will be under an engineer who will see that inspection throughout will be careful and complete, and that all details of the agreement are complied with. The engineer may prepare detailed drawings of the steel, or may accept those submitted by a bridge company. Either practice is satisfactory if the specifications respecting design are well arranged and the engineer checks the plan thoroughly to see that the specifications are complied with by the plans of the successful bidder. To meet this condition, the Provincial Highway Department of Ontario has prepared general specifications for highway bridges which fix standards for the Province.

The writer has no wish to speak slightly or unfairly of the well-intended efforts of many councillors to be economical and keep down municipal expenditure. They have been in the habit of themselves designing and building wooden bridges, and both they and the public have to discover for themselves that, in handling steel and concrete, they are entering a new field requiring specialized training and experience, and that a wiser economy dictates the employment of engineers for this work.

ACT TO AID IN THE IMPROVEMENT OF PUBLIC HIGHWAYS.

Office Compilation.

7 *Edward VII., Chapter 16; with amendments under 10 Edward VII., Chapter 14; 1 George V., Chapter 11; and 2 George V. Cap. 11.*

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows: —

1. The sum of \$2,000,000 is hereby set apart to be paid out of the Consolidated Revenue Fund of the Province to aid in the improvement of public highways subject to the terms and conditions hereinafter set forth. 1 *Edw. VII., c. 32, s. 1; 2 Geo. V. Cap. 11, secs. 1, 2 and 3.* \$1,000,000 appropriated for road improvements.

2.—(1) The county council of any county may by by-law adopt a plan for the improvement of highways throughout the county by assuming highways in any municipality in the county in order to form or extend a system of county highways therein, designating the highways to be assumed and improved and intended to form or be added to such system; and in case it may be impracticable to benefit all the townships in any county equitably by a system of county highways, such plan may provide for compensation to any township or townships which by reason of the location of such highways or of the unequal distribution of the expenditure thereon, may not benefit proportionately, by a grant of such specific amount or annual sum or both, to be expended in the improvement of the highways of such township or townships as when so expended will make such a plan equitable for the whole county. County bylaw adopting system of road improvement.

(2) A plan adopted by the county council, under this section, may include the purchase of toll roads or freeing the same from toll. 1 *Edw. VII., c. 32, s. 5.* Plan may include abolition of toll roads.

(3) A county council may from time to time while carrying out a plan of road improvement under this Act, by by-law make grants to incorporated villages or towns not separated from the county, for the purpose of improving such highways or portions of highways in such villages or towns as may be designated in such by-law and which are extensions of, or form connections between different portions of county roads, but no such highway shall by reason of such by-law or of the expenditure of any such grant thereon be deemed to have been assumed by the county or to form part of the county system of highways. 3 *Edw. VII., c. 26, s. 7.* Grants to incorporated villages and towns.

(a) A grant made under subsection (3) to a town or village having a population of not more than 3,000 shall be deemed to form part of the estimated expenditure in carrying out a plan of road improvement in such county for the purpose of ascertaining the amount of aid which may be granted to the county under this Act. Grant to certain towns and villages by county.

Proviso.

Provided, that the roads or streets to be improved in the town or village have been designated by the by-law of the council of the county, to which there shall be attached a plan of the town or village to be aided, and that such by-law has been approved by the Minister of Public Works, and that the work done upon such roads and streets is in accordance with the regulations of the Department of Public Works with respect to Highways.

Proviso.

Provided that in the case of a town or village having a population of more than 1,500, the amount granted under subsection (3) shall be expended solely upon roads and streets or portions thereof which lie opposite to lands on one side or the other thereof used for agricultural purposes; and

Proviso.

Provided, that the approval of the Minister of Public Works in writing shall be conclusive as to the population of any town or village for the purposes of this subsection.

Amendment made to section not to affect grants heretofore made.

7 Edw. VII., c. 16.

The amendment made by this section shall not affect the payment to a town or village under the said subsection (3) of any grant made by the council of a county and approved by the Minister of Public Works before the passing of this Act, and any such grant shall be included in estimating the expenditure of the county for the purpose of ascertaining the amount of aid to which the county is entitled under the said *Act for the Improvement of Public Highways* as if this section had not been passed. 1 George V. c. 11.

Regulations of Public Works Department.

(4) Every highway constructed or repaired in pursuance of a plan adopted by by-law approved by the Lieutenant-Governor in Council under this Act shall be constructed or repaired according to the regulations of the Public Works Department with respect to highways. 1 Edw. VII., c. 32, s. 6.

County to appoint road superintendent.

(4a) The Council of every county in which road improvements are undertaken under this Act shall by by-law designate an engineer of some other competent person subject to approval by Minister of Public Works to act as county road superintendent under the direction of the Council. 2 Geo. V., c. 11, s. 4.

Grant not to be made until after appointment.

(4b) No grant shall be made to any county under this Act until subsection 4a has been complied with. 2 Geo V., c. 11.

Foreman or Inspector.

(4c) The County Road Superintendent shall place some competent person as foreman or inspector in charge of any work which it is impossible for him personally to oversee, and it shall be the duty of the foreman or inspector to see that the work is properly carried out. 2 Geo. V., c. 11, s. 4.

Members of councils not to be appointed.

(4d) No member of the council of the county and no member of the council of any local municipality in the county shall be appointed

or act under subsections 4a or 4c or be employed by the county road superintendent in any capacity, and any such member who is appointed, or who acts or is employed in contravention of this subsection shall be disqualified from sitting or voting in the council of which he was a member at the time of his appointment or employment. 2 Geo. V. c. 11, s. 4.

(5) Where a by-law passed under the authority of this Act has received the assent of two-thirds of the members of the county council representing at least one-half of the total equalized assessment of the county, it shall not be necessary to submit the same to the electors of the county; provided that if before the final passing of any by-law under this Act the same has been submitted to and has received the approval of the electors of the county qualified to vote on by-laws for the creation of debts, such by-law may be finally passed by a majority of the members of the council present and voting thereon; and provided further that a by-law so submitted to the electors may after such submission or after the final passing thereof be amended by the council in order to comply with any direction or requirement of the Minister of Public Works, and it shall not be necessary to submit any such amending by-law to the electors. 8 Edw. VII., c. 23.

3—(1) The corporation of a county shall not be entitled to receive any aid under this Act, unless the by-law providing for the improvements in respect of which aid is to be granted has been approved by the Lieutenant-Governor in Council. 3 Edw. VII., c. 24, s. 4; 2 Geo. V., c. 11, s. 10.

(2) Upon the application of any county council for the approval of a by-law under this Act, the Minister of Public Works may obtain such report upon the plan adopted by such county council as he may deem necessary and may hear any township council which may be dissatisfied therewith before presenting such application for consideration of the Lieutenant-Governor in Council.

4.—(1) When a plan of road improvement adopted by by-law, approved by the Lieutenant-Governor in Council under this Act has been carried out, or at any time during the progress of the work, the county council may submit to the Department of Public Works a statement setting forth the expenditure to date in carrying out the said plan, including all payments of grants authorized by this Act, together with the declaration of the treasurer of such county that such statement is correct, and also the report of the county engineer or road superintendent that such work is in accordance with the regulations of the Department of Public Works, and on the receipt of such statement and certificate by the Provincial Treasurer, certified and approved by the proper officer of the Department of Public Works, the Lieutenant-Governor in Council may direct the payment to such municipal corporation out of the fund set apart under this Act of a sum equal to one-third of the amount of such expenditure. 6 Edw. VII., c. 43, s. 2.

Work in
united
counties.

5. The council of any union of counties which has passed a by-law under this Act designating the roads to be improved within the united counties, after such by-law has been approved by the Lieutenant-Governor in Council may with the consent of two-thirds of the representatives of any county in the union by by-law apportion the amount to be expended in any year in such county and may provide that the amount so to be expended shall be raised by special rate upon the property liable to taxation in such county, or with the like consent the council of the united counties may by by-law provide for the issue of debentures for the amount to be expended and may declare that such debentures shall be a charge upon the property liable to taxation in such county, and that the amount required to be raised annually for principal and interest of any debt so created shall be levied and collected in each year during the currency of the said debentures by an annual special rate upon the property liable to taxation in such county. 6 Edw. VII., c. 43, s. 3.

Issuing
debentures
for expendi-
ture on
highways.

6. The municipal council of any county taking advantage of this Act, may from time to time raise by debentures, payable in not more than thirty years, as provided by *The Municipal Act*, such sums of money as may be necessary to meet any expenditure on highways under this Act, but in no case shall the debentures issued under this Act exceed two per cent. of the equalized assessment of the county; or the Council instead of raising money by debentures may provide the money required out of County funds, or by an annual County rate in the manner authorized by *The Municipal Act*, and all the provisions of this Act shall apply to any moneys heretofore or hereafter so provided as fully as if debentures had been issued, whether a by-law transferring such moneys to a special account under this Act has or has not been passed. 1 Edw. VII., c. 32, s. 9; 2 Edw. VII., c. 12, s. 17 (1); 2 Geo. V., c. 11, s. 6.

Raising
money by
general
rate in-
stead of
debentures.

3 Edw. VII.,
c. 19.

Statute
labour,
application
of upon
roads
aided.

7. The council of any township may by by-law direct that the statute labor for which lands fronting on roads in such township constructed or repaired under this Act may from year to year be liable may be commuted, and the amount so received may be paid over to the county and applied in repairing such roads and in removing snow therefrom and keeping the same open during the winter months. 5 Edw. VII., c. 27, s. 2.

Aid to
county
where
road system
established
prior to
7 Edw. VII.,
c. 16.

8. Where before the passing of this Act the council of any county had established a system of county roads approved by the Lieutenant-Governor in Council as provided by *The Act for the Improvement of Public Highways*, such system of county roads shall be deemed to be within the meaning and intent of this Act. 3 Edw. VII., c. 26, s. 6.

Arrange-
ments for
construction
or improve-
ment of
object-
lesson
roads.

8a.—(1) The Minister of Public Works may arrange with the corporation of any local municipality for the construction or improvement therein of an object-lesson or experimental road, or of more than one such road. 2 Geo. V. c. 11, s. 9.

(2) The Minister may lay out, construct, improve and complete any such road and *The Public Works Act* shall apply to anything done by him under this Act. 2 Geo. V., c. 11, s. 9. Application of 10 Edw. VII., c. 11.

(3) The cost of material, labour, special engineering or other services, plant, machinery and equipment and the repair and maintenance of plant, machinery or equipment in or about any work undertaken by the Minister under this section or incidental thereto, shall be paid out of the fund set apart under this Act, upon the certificate of the Minister and for that purpose accountable cheques may from time to time be issued against such fund in favour of the Minister upon his requisition therefor. 2 Geo. V., c. 11, s. d. Cost of work.

(4) A road shall not, by reason of its having been constructed or improved under this Act, become or be the property of the Crown, but every such road after its construction or improvement shall be under the jurisdiction of the council of the municipality in which it is situate and shall be maintained and kept in repair in the same manner as other roads in the municipality. 2 Geo. V., c. 11, s. 9. Road to be maintained by municipality.

9. Wherever a county road intersects a highway which is not a county road the continuation of the county road to its full width across the road so intersected, including the bridges and culverts thereon or touching thereon, shall be a part of the county road system. 3 Edw. VII., c. 26, s. 8. Intersection of other highways by county road.

10. A county council shall not be liable for the building, maintenance or repair of sidewalks on any county road or portion thereof. 3 Edw. VII., c. 26, s. 9. County Council not liable for side walks on county roads.

11.—(1) The county council shall in respect to county roads have all the powers given to townships, cities, towns and incorporated villages under *The Act respecting Snow Fences*. 3 Edw. VII., c. 26, s. 10. Counties to have powers as to snow fences. Rev. Stat. c. 240.

(2) The county councils shall, in respect to said roads, have all the rights, powers, benefits and advantages conferred either by by-law or contract or otherwise, upon the local municipality or municipalities which had jurisdiction over said roads before said roads were assumed by such county council, and the said county council may sue upon such rights or under such agreements or by-laws in the same manner and to the same extent as the said local municipality or municipalities might have done if such roads had not been adopted as county roads. 10 Edw. VII., c. 14. Powers of county council over roads assumed.

12. All highways designated and assumed by a county council in accordance with section 2 of this Act, except as in subsection 3 of section 2 otherwise provided, shall be maintained and kept in repair by the Corporation of the county in which such roads are situate, and in all cases of doubt or dispute as to what constitute works of maintenance Highways to be county highways.

Proviso.

or repair, and what constitute works of construction and the purchase and maintenance and repair of road machinery, plant and equipment, properly chargeable under this Act, the decision of the Minister of Public Works shall be final; provided that after the expiration of three years from the final construction and completion of the county system of roads, which shall be so declared by the Minister of Public Works, the county council may, with the approval of the Lieutenant-Governor in Council and of two-thirds of the minor municipalities in the county expressed by by-law, declare that such system of county roads shall, on the 1st of January following, revert to the local municipalities in which the same are situate, and such roads shall thereafter be maintained in the same manner as township roads. 5 Edw. VII., c. 27, s. 4; 2 Geo. V., c. 11, s. 9.

Roads
revert to
townships.

1 Edw. VII.,
c. 32 and
amend-
ments re-
pealed.

13. The Act passed in the first year of His Majesty's reign, chaptered 32, and the amendments thereto, are repealed and the foregoing provisions are substituted therefor.

Further Amendments.

2 Geo. V. c. 11.

The Highway Improvement Act, 1912, 2 Geo. V., c. 11, contains the following further provisions:

Annual
statement to
Minister.

5.—(1) The treasurer of every county shall, before the first day of March in each year, make up and transmit to the Minister of Public Works a detailed and audited statement of all expenditures upon, or in connection with, county roads or bridges for the next preceding calendar year.

Form of
statement.

(2) The statement shall be in such form as the Minister of Public works may direct.

Publication.

(3) The treasurer shall forthwith publish the statement, at least once in a newspaper, published in the county town.

Distribution
of copies of
statement.

(4) The clerk of the county shall procure not less than one hundred copies of the statement and shall deliver or transmit by post one of such copies to each of the electors who shall first make request for the same.

Where im-
proved
highway
ceases to be
important.

8. Where it is found by the Minister of Public Works that any highway assumed by the county council under the said Act, has ceased to be, or for some other reason is not of sufficient importance to be constructed and maintained as a county road, such road or section thereof may be struck off the approved plan of county roads, by the Lieutenant-Governor in Council, and such road or section thereof shall thereupon revert to the local or township municipality in which the same is situate.

Authority
to enter
into agree-
ment with
Dominion
Government

11. The Lieutenant-Governor in Council shall have authority to enter into agreement with the Governor in Council or with any member of His Majesty's Privy Council for Canada acting for and on behalf of the Governor in Council for the application to the cost of highway improvement under this Act, of such subsidy or subsidies, or any part of such subsidy or subsidies as may be appropriated for highway improvement by the Parliament of the Dominion of Canada, and the

Lieutenant-Governor in Council shall have authority to vary the proportionate amounts to be paid to or by municipalities under this Act, by reason of such subsidy or subsidies, and may vary the conditions under which payment shall be made for construction, repair, or maintenance, in accordance with such agreement.

12. When any highway leading to, or adjacent to any city or town separated from the county is widened, straightened, reconstructed or otherwise improved, or requires the expenditure of a greater amount for maintenance and repair to meet the requirements of increased, heavy, constant or other extraordinary traffic to and from such city or town, beyond the requirements which, but for the existence of such city or town, would be deemed those of a standard highway for the locality, the corporation of such city or town by by-law passed with the assent of at least two-thirds of the members of the council thereof may agree with the corporation of the county to contribute such additional cost, or a proper proportion of the cost, or that the amount of the contribution of such city or town shall be determined by arbitration under *The Consolidated Municipal Act, 1903*, and may, without the assent of the electors, provide by by-law for the issue of debentures payable in not more than twenty years from the date of the issue thereof to raise the amount agreed upon or awarded, or may agree with the corporation of the county for the payment of such amounts in annual instalments to be raised by annual special rate upon the rateable property in the city or town.

Contribution
of cities, etc.,
to improve-
ment of
county
roads.

13. The council of any county may assume as a county road under this Act, any main or leading road or roads through or within such county, and where such road or roads do not serve all townships equally, the county council may, with the approval of the Minister of Public Works, omit from assessment any township or townships through which such road or roads do not pass, or may assess any or each township through which such road or roads pass for a larger or smaller amount in order to equitably assess the cost; or the council of any county in which a system of roads is established may, upon the application of a township council, and with the approval of the Minister of Public Works, levy a special rate upon the township for the construction, improvement or maintenance of the county road or roads within such township.

Assuming
main roads
as county
roads and
assessing
townships
specially
benefited.

14.—(1) The said *Act to aid in the Improvement of Public Highways* may be cited as *The Highway Improvement Act*.

Short title
to 7 Edw.
VII. c. 16

(2) The Act passed in the eighth year of the reign of His late Majesty King Edward the Seventh, chaptered 23, may be cited as *The Highway Improvement Act, 1908*.

To 8 Edw.
VII. c. 23

(3) The Act passed in the tenth year of the said reign, chaptered 14, may be cited as *The Highway Improvement Act, 1910*.

To 10 Edw.
VII. c. 14.

(4) The Act passed in the first year of the reign of His present Majesty, chaptered 11, may be cited as *The Highway Improvement Act, 1911*.

To 1 Geo.
V. c. 11

(5) This Act may be cited as *The Highway Improvement Act, 1912*.

To present
Act.

REGULATIONS RESPECTING HIGHWAYS.

The following are the regulations of the Public Works Department with respect to county road systems, under the Act to Aid in the Improvement of Public Highways, 7 Edward Seventh, Chapter 16, Section 2, Subsection 4, upon compliance with which the county becomes entitled to the Provincial grant of one-third of the cost of construction.

Management

1. The management of all road improvement under the Highway Improvement Act is to be centralized in a capable county road superintendent (or engineer) appointed by and acting under the direction of the county council. A foreman is to be placed by the road superintendent (or engineer) in charge of any works which he cannot personally oversee.

General character of work.

2. Improvements are to be of a character suited to the requirements of the district, as regards the amount of travel, nature of the soil, quality of road metal available, and other local conditions.

Road accounts.

3. An approved system of keeping road accounts is to be adopted, showing the extent and location of each work of improvement, and the cost of labor and materials used. Expenditure for maintenance and repair, or other outlay not chargeable under the Highway Improvement Act, is to be kept separate and distinct from construction costs. Time sheets or time books are to be used for the payment of men. Such returns, reports and statements, respecting all details of work, methods and expenditure, are to be supplied to the Provincial Engineer of Highways as he may from time to time require. Blank forms for annual returns will be supplied to county engineers or other officials upon request.

Cost of maintenance.

4. The cost of maintaining and repairing roads before or after their construction is not to be a charge under the Act. This includes such items as patching holes and ruts, weed cutting, snow cleaning, and any temporary or other work not forming part of permanent construction. A separate statement of expenditure for repairs is to accompany the annual Departmental returns.

Statement of completed work.

5. Returns to the Department are to show definitely, according to township, lot and concession, the location and terminal points of the work done; thereafter, similar work for that road is not to be a charge upon the Province. Each section of road is to be fully completed at one time unless circumstances do not permit. A repeated charge for any class of work, such as draining, grading, metalling, etc., will not be allowed; but when reported by the county engineer, is to be regarded as finally completed for that class of work on the defined section of road.

Financial year to close Dec. 31.

6. Statements of annual expenditure are to close on December 31st of each year, and are to be transmitted to the Minister of Public Works as soon thereafter as circumstances will permit.

7. "Old" roads herein referred to, include such highways as have been previously well graded and metalled with gravel or broken stone, and which have a solid and deep road-bed. Former toll roads, and roads of a similar character will usually fall within this class. Old and new roads.

"New" roads in general include earth roads which may or may not have been previously graded, and which have had little or no gravel or stone placed upon them.

"Single track" roads shall be those metalled from 8 to 11 feet wide; and "double track" roads shall be those metalled from 12 to 16 feet wide.

8. Work on old gravel or stone roads of the nature of reconstruction or repair may consist of:— Work on old roads.

(a) Grading by cutting away shoulders of earth and sod at the sides, and improvement of drainage.

(b) Grading, draining and metalling with good gravel or broken stone, or other approved surface material.

9. Work on new roads may consist of:—

Work on new roads.

(a) Grading and draining.

(b) Grading, draining and metalling with good gravel or broken stone, or other approved surface material.

10. Construction is to be guided by the last revised "Principles of Roadmaking," issued by the Provincial Engineer of Highways, except as more specifically stated in these regulations. Manual of Roadmaking.

11. It is essential that all roads be permanently graded and turn-piked before putting on gravel, broken stone or other surface material. In this see that old gravel and stone road-beds are not unnecessarily injured or destroyed by being covered with earth and sods from the sides. (Vide Section 25.) Roads are to be given easy, flowing, uniform grades, cutting down hills and knolls, and filling depressions. The standard grade shall be 4 per cent.; but a maximum rise of 8 per cent. may be permitted. Thorough grading is insisted upon. Grading and grades

12. The roadway graded for traffic is to be as straight as practicable, and in the centre of the road allowance, with a uniform width between the inside edges of the open ditches, and all work is to be carefully staked out for this purpose in advance of draining, grading and metalling. Roads to be straightened.

13. The width of the roadway, shoulder to shoulder, on cuts and fills should not be less than 18 feet. Main roads should be graded to a width of 24 feet, and roads of least travel should not be less than 18 feet. Width between ditches.

14. Side slopes in cuts and fills are to be one and one-half feet horizontal to one foot vertical. Side slopes.

Crown.

15. The crown or camber given the newly finished and consolidated roadway is to be uniform, and on single track roads is to have a rise of one inch to the foot from the shoulder of the ditch to the centre of the road. On double track roads metalled with broken stone and thoroughly consolidated by rolling, a crown of one-half inch to the foot will be sufficient. Special care is to be given to the crown at or near the top of hills; and the crown on hills is to be sufficient to turn the water to the gutters, and prevent it from following the wheel tracks.

Width of metal.

16. Road metal (gravel or broken stone) is to be placed in the centre of the grade, to a width and depth sufficiently to form a serviceable road, having due regard to the character and extent of traffic.

Minimum width of metal.

17. The gravel or stone spread on the road should not be of a less width than eight feet, nor of a less depth than eight inches, and is to be in continuous stretches, preferably not less than one mile in length. Ordinary patching and repair is not a work within the meaning of the Act.

Use local metal if suitable

18. The gravel or broken stone used on the road should preferably be obtained in the vicinity of the road, but must be of good quality.

Quality of stone.

19. The stone used, may be broken field stone, quarry stone, or crushed and screened gravel, care being taken to select a durable quality such as will withstand wear and exposure to the atmosphere, discarding weathered limestone, friable sandstone, or other weak metal.

Quality of gravel.

20. Gravel is to be clean, moderately coarse and free from an excess of clay, sand or earthy material.

Coarse gravel.

21. In applying natural pit gravel containing many large stones, the large stones are to be raked forward from the loose gravel, spreading them so as to be underneath the next load and in the bottom of the road.

Rolling.

22. The gravel or broken stone placed on main roads is to be thoroughly rolled. Roads of less importance, if not rolled, are to be maintained by raking or trimming with a grader until consolidated by traffic. Each county shall have at least one steam roller.

Load stone from bins.

23. Stone when crushed is to be elevated into bins from which it can be conveniently and quickly loaded into wagons.

Surface dressing.

24. Clay, sod, or other earthy material is not to be used as a surface dressing or binder on broken stone roads. Stone screenings are to be used for this purpose. Care is to be taken that an excess of this surface dressing is not used.

Repairing old roads.

25. Where roads have heretofore had gravel or broken stone placed on them, they should be reconstructed or repaired by cutting off shoulders with a grader, and adding a sufficient amount of gravel or broken

stone to fill ruts, depressions, properly crown and make a road sufficiently strong to accommodate the travel. The sod and soft material is to be thrown outward, never drawn to the centre.

26. Good drainage is of primary importance. Provide open drains Drainage. at the sides of the road, with a constant fall to a free outlet, with sufficient capacity to carry away surface water.

27. Tile under drains are to be laid to carry away excessive sub-Tile drainage. soil water, lower the water-line, and secure a dry road-bed wherever a moist, damp or springy condition of the sub-soil exists.

28. Durable sluices and culverts are to be built when necessary. Culverts and bridges. Bridges must be substantial in character, preferably of concrete or steel.

29. Bridges are to comply with the approved specifications of the Bridges. Provincial Engineer of Highways; all forms of tender, specifications, and the work throughout, are to be in charge of an engineer qualified to see that such specifications for steel bridges are carried out. Wherever practicable, bridges are to be built by contract, for which tenders shall be received after due public notice has been given.

30. Modern roadmaking machinery, equipment, implements and Machinery. plants are to be used, so as to secure the greatest results from the expenditure, and to provide the best work. Machinery and other equipment is to be sufficient only for proper construction, and authority to purchase is subject to approval.

31. Work is to be carried on in such manner and at such rate as Rate of construction. will ensure completion of the designated system of roads without unnecessary delay and within a reasonable period, consistent with the total extent and cost of construction.

32. When in any county the roads assumed as county roads are not Classification of county roads. of equal importance, they may be classified, and the nature and extent of improvement to be carried out on each class designated by the Provincial Engineer of Highways. Provincial liability shall thereafter be limited to one-third of the cost of improvement so designated.

33. Plans of construction, systems and means of carrying on the Approval of Provincial Engineer of Highways. work, contracts and specifications pertaining thereto, are to be such as will produce durable construction with economy of outlay, and are to be submitted for and shall be subject to approval.

34. The words "approved" or "approval" wherever used in Interpretation. these regulations shall mean approval by the Provincial Engineer of Highways, and whose decision as to the scope, intention and interpretation of these regulations, or any part thereof, is to be final.

35. Where, owing to special local conditions, any departure from the foregoing regulations may be desired, upon application of the council, or the County Engineer or Road Superintendent, an examination of the road or roads or circumstances in question will be made by the Provincial Engineer of Highways or his representative for the purpose of deciding with regard thereto.

W. A. McLEAN,

Provincial Engineer of Highways.

J. O. REAUME,

Minister of Public Works.

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PROCEEDINGS
OF THE
Tenth Annual Meeting
OF THE
Ontario
Good Roads Association
1912

Appended to the Annual Report of the Provincial
Engineer of Highways

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Ontario Good Roads Association

TENTH ANNUAL CONVENTION.

Monday February 26th, 1912.

Morning session 10 o'clock.

THE PRESIDENT, T. L. KENNEDY in the Chair.

THE CHAIRMAN: We only intend to appoint a few committees this morning.

Moved by Mr. Sanderson, seconded by Mr. Spratt: That Messrs. Cummings, Beck, Griffith, McKay and Jupp be a Committee on Resolutions, with power to add to their number. Carried.

Moved by Mr. J. R. Griffin, seconded by J. S. Beck: That Messrs. W. H. Pugsley, A. M. Rankin, M.P.P., K. W. McKay and L. A. Hamilton be a Committee to revise the Constitution. Carried.

Moved by Mr. Jupp, seconded by Mr. McKay: That Mr. Bowman be Auditor for the ensuing year. Carried.

Afternoon session, 2 o'clock.

PRESIDENT'S ADDRESS.

THE PRESIDENT: I am pleased to see so many here this afternoon. I am sure we did not expect to have such a large attendance on Monday, the first day of the week. On account of the storm, the trains are not running very well, so that we are looking for the biggest attendance yet.

The year of 1911 has been the most eventful year Ontario has ever had, from the Good Roads point of view. Both the Federal and Provincial Governments, recognizing that the farmers can no longer afford to build and maintain a good system of highways have promised grants for road making purposes, and we hope that instead of having only two classes of roads, "good" and "bad," we will in the near future have three classes, "good," "better" and "best."

Following a resolution passed by this Association last year, your executive started a campaign for Provincial Roads. We sent circulars to every municipality in Ontario. This resolution was passed by nearly every Council and Board of Trade in Ontario.

It has been pointed out that there is a great difference in the methods of road building throughout Ontario. In order to make a more uniform system of county roads, your executive planned a trip for the superintendents and engineers of counties (in which the county road system had been inaugurated) over the county roads of York, Peel, Halton, Wentworth, Lincoln and the Government Road at Niagara Falls Park. About thirty attended this trip and it is hoped that in 1912 a short convention of road builders can be arranged to study the methods of building and maintaining roads.

It is easily seen, and has been recognized by a great many governments, that the rural population is not able to build good permanent roadways. The total

assessment of Ontario is one thousand million dollars, and half of this is on cities alone. These cities have to build a few hundred miles of road, while the other five hundred million dollars, or the total assessment of the towns, villages and townships of Ontario, has to build and maintain 50,000 miles of roadway. This is preposterous, and now the cities recognize that fact and are offering to help the rural communities to build and maintain their roads. But there is only one way to build good roads, and that is for the Government to build, and, more important still, maintain them after being built.

This fact is recognized by the Premier of the Dominion and the Premier of Ontario, and both of these gentlemen have promised us assistance in road making.

On February 8th a deputation of over 300 members of the Ontario Good Roads Association waited on Premier Borden, Hon. Mr. Cochrane, Hon. Col. Hughes and other members of the House of Commons. This was the largest and certainly the most important and influential deputation in connection with road making ever brought together in Canada. We asked that enough money be given to the Provincial Governments to enable Ontario to build a permanent system of highways and that the Dominion Government should help to maintain them. We also asked that a Bureau of Highways should be established at Ottawa.

We received the promise that the Federal Government should help the Provinces to build roads (Applause). That promise will hold good and that is the first plank in the Provincial Road System. They, however, said they would not help to maintain the roads. I may say that I don't think any of us expected they would do so. It was asking a little too much to expect them to do both.

I want to say how proud I was to be a member of that deputation. A great many men have spoken to me since and said they were the finest body of men that ever came in a deputation to Ottawa. That deputation is something that we should be proud of for all time to come (Applause), and I am sure that we accomplished a vast amount of good.

It has been advocated that the Dominion Government should build roads in the Provinces, and in clause 6 of the Hon. Mr. Cochrane's Bill to Assist in the Improvement of Highways that power is given to the Federal Government. I think the idea of the federal highway originated from the fact that England, France, Germany, Holland, Switzerland and other countries have had federal highways built by the federal government, but to my mind the idea of a federal highway in Canada is absurd. A federal highway is only a trunk road. It would not reach the individual. Of course, it would be all right from the standpoint of the American automobilist. It would touch only the main cities and benefit only those going from city to city. Then it would be dependent a great deal on the goodwill of the Province in benefiting the farmer.

What Ontario wants, especially the farmer, is a Provincial system of main highways reaching from county town to county town. This would enable the man living in Belleville to go to Barrie, Orangeville, Owen Sound, Goderich, Simcoe, or any other country town, by direct provincial road. Such a system would comprise nearly 2,500 miles and every county in Ontario, including Prince Edward, would have a share of this. It would be essentially a farmers' road, would encourage and educate the counties to county road systems and to better township roads, so that every farmer in Ontario could get to his market town. We would thus have good township roads, better county roads and then on to the excellent Provincial road which would be built.

ADDRESS OF WELCOME.

G. R. GEARY, Esq. (Mayor of Toronto).

Mr. President and Gentlemen:

I think in the three years that I have had the pleasure of addressing the Ontario Good Roads Association I have come here anywhere from an hour to two or three hours after the time which was set. I am glad to-day, despite weather conditions, to be here so nearly on time.

During the two or three years that I have had the pleasure of meeting this Association I have seen, as you have all seen, a tremendous improvement in the general public idea in regard to roads; whether or not we have seen the same improvements in the roads themselves is another question. The City of Toronto, with the hearty co-operation of the County of York, has allotted a sum which, with the Government grant, will amount to \$300,000 towards the improvement of the highways leading into the City of Toronto (Applause). I think it is as good business as the city ever went into, because even more important in many ways than the steam and electric roads, is the maintaining in proper condition of the great highways that run all through this Province, connecting the different municipalities together, and connecting the people who live in the villages and cities with each other and with the farmers of the surrounding country. I think the farmers will agree that it is a good thing that they should have a proper means of getting their produce into the towns and villages.

I remember when I was living in the country I lived in an old settled township where the roads were in a good condition. The concessions and side lines in that township were, as far as my recollection goes, always in a good state for travelling.

However, the farmer of this age and of the future is going to realize, I think, through good roads, through electric transportation, through telephone communication and through the getting together of all sorts of modern conveniences, that the life on the farm will not be a lonely life, that he will be connected closely with society, and the comforts of living will be greatly enhanced as he goes along. (Applause.)

So we hope to find, and I say this in a selfish way, that there will be a marked increase in the business we as a city will do with the people in the surrounding country through the spending of that \$300,000, which will be expended on trunk lines and general lines of communication.

It was to me a very notable thing that the Government of Ontario adopted as one of its planks in the last election the betterment of highway conditions throughout the Province of Ontario, and stated that it was their firm determination to impress upon the Dominion Government that they, too, had a duty in that regard and that funds of the Dominion Government should be devoted to the establishment of main lines of communication. To my mind it is a proper subject for the Dominion Government to consider, and a proper way for the Dominion money to be expended. I hope that we may see very good and very early results come from the adoption of such a policy.

In the large cities and towns we are not interested so much except for our own objects and needs, but when one hears of the interesting figures given by men like Mr. McLean, who are interested in road building, we cannot but be astonished to find what a tremendous bearing it has upon the prosperity of the Province.

I am glad that your Association maintains such an interest among its members that they come out in a storm like this in such large numbers. The work is for the benefit of the people. It is one of those good things in the public service that men devote themselves to in our Province, and I am glad to know that we have men amongst us of the calibre of this Association who are ready to devote themselves to the public good in such a whole-hearted way.

We are very glad because of this to know that you are succeeding, and doubly glad that you have selected the City of Toronto as your meeting place. You do us honour in coming here, and as far as it may go the welcome of the City is given to you very heartily and very cordially, (applause), and it is in no perfunctory or formal way that we say to our friends from the surrounding municipalities that we are glad to see them in the city. Should our friends who happen to be here at this time have occasion to call upon our services in any way we will be only too happy to confer anything upon you that lies within our power. (Applause.)

I trust that you may have the success that has attended you heretofore, and again assuring you we are very, very glad to see you here, Mr. President and Gentlemen, I will close.

ADDRESS.

ANDREW BRODER, Esq., M.P. (MORRISBURG).

Mr. President and Gentlemen:

I am here on the invitation of some of you good people, and I scarcely know what my mission is. I was told you were going to talk about good roads. I could talk more easily about bad roads, because I think I have been over bad roads more than any other kind. Now, we want to change that. You have been talking about good roads and are, like all good moralists, talking about things as they ought to be instead of things as they are. We have got to deal with things as they are, not as they ought to be, and the gentlemen who have instituted this organization, who have gradually grown and created a public opinion in favor of this great enterprise, have done more for the benefit of the public than they will ever get credit for. The men who see future requirements under present conditions are the kind of men who are valuable. I take it the gentlemen I see before me are that class of men, Mr. President.

I think we don't all realize what this question of good roads means. There have been road makers for a great many years. Hannibal was a roadmaker, Cromwell was a roadmaker, Napoleon was a roadmaker. These fellows created a stir in the world, that was wonderful. However, they were building roads for a different purpose—not to civilize the people, but to conquer the people. What we want to-day is to build roads not only to civilize the people, but also to keep the people on the land. (Applause.)

I take it that one of the most serious problems before the Canadian people to-day is to get the people on the soil. You say, "Do you think the good roads will help to do that?" No other factor will do so much. I do not say take away a boy's or girl's liberty so that they cannot leave the farms, because there would be no mayors for the cities if the boys did not leave the farms. (Laughter.) The cities would die out of dry rot. No! they require that good blood. But we want the boy to realize that on the farm is a good place in the world for him to

stay; that the possibilities there (although they may not be as great in some directions as elsewhere) taken all round are greater there than anywhere else in the world.

I have had the privilege, and I consider it a very great privilege, of talking to men who have moved along advanced lines, perhaps, on this question. I was talking to a gentleman to-day who is with the State Commission of the State of Massachusetts. He told me about their system of State Roads, and what they had done not only to build a good road but also to beautify the sides of the road. I said, "What effect has that had on your abandoned farms?" He said, "Hundreds of people have come to the abandoned farms because of the good road system." I say it is better to keep the boy on the farm than to have him leave and then bring him back again.

Not only the man in the city, but the man in the town, in the village, on the farm are all equally interested in the betterment of the roads in this country.

France has her State Roads. She has about 52,000 miles of state roads built absolutely and controlled by the State, and maintained by it, and she has some hundreds of thousands of what we would call municipal roads and then rural roads. Agriculture is brought to a very high state of cultivation in that country. Perhaps no people in the world do as much on that line as the French, and one of the greatest considerations in that respect is the good roads.

There was a man built a good road down through the Highlands, and I daren't say to a Scotchman that he was trying to civilize the Highlands. It had that effect nevertheless. There was nothing ever did as much for the Highlands as that military road. It brought cultivation to neglected farms and waste places were utilized. An Irishman made some poetry on that, and as I am the son of an Irishman I must give it to you:

"If you had seen these roads before they were made,
You'd lift both your hands and bless General Wade."

That is what some people will do when they are admiring the good roads of this country after some of you are dead; they will be blessing your memory.

We have spent in actual grants to railways—money grants, guarantees of bonds, provincial and municipal—\$500,000,000. You have borne your share of that burden. Now you say, "We helped bear that burden as agriculturists. We have not only done that, but we have built our roads as best we could and fought our way." Now we think it is time to give the farmer a road to get to the railway, to improve his conditions. He has helped to do the other, which was necessary.

We can scarcely realize the fact that when Queen Victoria came to the throne in 1837 there were four cars, one engine and sixteen miles of rails in Canada, and those rails were not iron; they were wood. We have 25,000 miles of railroad to-day. The man who tilled the soil helped to carry that burden and now we say it is time to go down to him and say, "Hello, this is too hard work: I would like to help." We must help him out of his difficulties and make his home not only attractive to him, but so attractive as to bring people like Mr. Mayor here down to the rural districts to spend their money. What is going to happen when we have this good road system is this: we will coax people in that way out of the City of Toronto to come to the country to live.

Some poor man may say, "Oh, but that will raise the price of chickens; you will sell them all to him." Why then, raise more chickens; that is what we want

to do. Some people say, "Those automobiles will run on the roads." I hope they will. Now, we may as well face that matter. The farmer runs away with the **wrong** idea. He **doesn't** realize that the motorist has not the first place on the road. He only gets first place by frightening your horse likely. You and your horse and buggy have first place. I think the man on foot comes next and then the bicyclist and these other fellows should follow behind.

In the early history of the New England States, before railroading, there was a strife among the people in the different localities about making the road attractive and good, so as to attract those class of people who rode in carriages. It created a better system of roads and more attractive premises. The railways came along and those people no longer travelled in that way and the highways were deserted, so the whole incentive was gone.

There is only one way to solve the problem of the automobilist. Treat him well and tax him to keep up the road. I wouldn't tax him before he comes, but let him get there first. In England they tax these automobiles according to the power, and they go up as high as \$110 a year. In Canada, they are now willing to pay a sufficient tax to help to maintain these roads, and there is no use making them if you don't maintain them.

The Federal Government of the country has proposed to assist the good roads system of the Province. I cannot say what form that may take, but it will take the form not only of definite, but I believe of liberal assistance (applause). and unless it is fairly liberal, why, then, it won't do what we hope it may do for the future. I don't believe the Federal authorities should say, "We will build a road in a certain place," without consultation with the people affected and a settlement of the routes of the roads. We must have co-operation in dealing with this great question.

We have got to get more people on the land, who are willing to fight the battle of the soil, so to speak. I heard a good old German professor talking about scientific farming. I wish you could have heard him. He said the first time he commenced to talk scientific farming it was out in the then new West of the American States. He said it was a good job there was a basement in the church where he was speaking, for they chased him down the cellar (laughter). I want to say to the scientific man if he is here, "You get down with your science to the struggling man and learn the philosophy of his experience, and the two together will get at the world's problem. Get down to the fellow in the furrow: shake hands with him. Sometimes we entertain angels unawares."

I heard a very good story about Lord Lansdowne. He is a rather small, diminutive man. He used to walk sometimes up to the Government House from the City. There was a farmer outside the City, whom I knew very well—a decent sort of a chap, but if he thought you were imposing upon him he would fly all to pieces. He had driven into the City with a load of hay, and on his return overtook Lord Lansdowne. He stopped with his empty hay rack and said, "Stranger, will you ride?" Lord Lansdowne said, "I don't like to trouble you." The farmer said, "Climb up here"; so the Governor-General climbed up on the hay rack, and began to chat. The farmer informed him he had travelled considerably, but he had never seen the Governor-General and would like very much to see him. When they got opposite the gate of Rideau Hall the Governor-General said, "Will you please stop and let me climb down?" Then he went on, after he had reached the ground, "You were wanting to see the Governor-General—here he is. I am the man." "Not by a d—— sight," shouted the man, "who

ever would appoint you for a Governor-General." (Laughter.) Lord Lansdowne told that to a friend of mine. The farmer won't be imposed on any longer; there is a sample.

Let us get down to the question and deal with it. I think we should have good roads in this country so as to help the man to get from his door to church, if necessary. It got so that he used to climb a fence to go, but you can't get him to go now with the fence down. We have got to improve his condition and make his home more attractive. I don't admire the farmer who doesn't attempt to improve conditions for his family. Why shouldn't he have a bathroom in his house. He has been making his wife pump up water for forty or fifty years. Why doesn't he turn on a tap and have it run down. These are some of the things you have got to bring about.

You have got to get better roads leading to your house. Don't get away from your house; don't get away from your family. Stay with them and use the better road for them to enjoy it with you. Improve the conditions at home. The homes of this country are its future salvation. We may talk about the problems of our West and of the assimilating of foreigners coming in, but there is only one safeguard, and that is to keep the home of this country all it has been—a distinctive place of virtue for our boys and girls. (Applause.)

I want to say before I sit down that the Federal authorities ought to give to this undertaking sufficient help so that the roads of our country may have some character, and you will know as you drive out that you are on a road that has received some recognition by the influence of the authorities. It is a new departure. I suppose we really have no right to hand out Federal money to the rural districts for the purposes of good roads, but I think there will be no trouble with the Province and with the Federal authorities when you are giving the people something beneficial. If you were taking something away it would be different, but when it is something for the benefit of every citizen it must be justifiable.

Another argument: I have always held this, that the Provincial means of taxation is limited. Outside of direct taxation we have not any power excepting what is given us. Now, here is the point. If you increase the population in the country you increase the Federal revenue, because under our tariff system if you increase the population you increase the consumption of customs goods, and the Federal revenue, and you increase the expenditure of the Province for schools and for the administration of justice without any corresponding financial help. So I say there is a strong argument in favor of the Federal Government coming down, so to speak, and helping the Provinces and the people through some of these channels which are in the greatest interest of most people.

COUNTY ROAD CONSTRUCTION IN ONTARIO.

W. A. McLEAN, CHIEF ENGINEER OF HIGHWAYS FOR ONTARIO.

Canadians are universally proud of their country, and of its resources of mine, forest and field. The possession of such a splendid land carries with it certain obligations to do as our forefathers have done, to make and leave it a better place to live in than we found it. A tremendous energy is now being exerted to develop Canada, and one of the striking phases is in relation to agriculture, in which, more and more, improvement is being sought, and the farmers of the country have entered upon what we trust may be a long period of advancement and prosperity.

To aid in the development of Canada one of the larger enterprises has been the construction of steam railways. Over 25,000 miles have been built, and the capital invested exceeds 1,500 millions. So intent have the Canadian people been upon securing railway facilities, that land and cash subsidies and other aid have been granted by the Federal and Provincial Governments and municipal corporations, amounting in value to about 600 millions; or nearly one-half the total capital investment in railway construction.

Railway construction has been supplemented by canals, harbours and steamship lines, so that, at a very large cost, the people of Canada have generously provided for an important section of the transportation problem. Having great resources, and having magnificent railway and waterway facilities, we are still very much like the man who had a wagon and a team of horses, but was without harness; and so neither wagon nor horses were of any use. The need of Ontario and of Canada to-day is a system of good roads that will harness our railway and waterway team to the farm, whereby both the farm and the greater transportation systems will attain their full value and usefulness.

At the present time the roads of Ontario are largely maintained by the townships with statute labour, while important construction is being carried on by county councils. Proposals of Federal aid suggest that the road organization of the Province may be broadened out so as to include three classes, township, county, and state, on a basis such as has created the good roads systems of older countries and of a number of the American States.

The actual building of good roads is an important engineering problem too seldom recognized as such, with the result that there is and has been much wasted energy. But while it is important to know how to build good roads, the great object is so to organize as to get the work done. If proper organization is provided, all the rest will be taken care of by this organization; and such an organization will include or create skilled planning, efficient direction of labour, and good finance. It is needless to condemn the ordinary township system of statute labour. It has done much good in the past under pioneer conditions, but its faults are fully apparent to those who are accustomed to good business organization. What is advocated and urged is that a more effective system be put in its place. The abolition of statute labour is advisable only because there is a more efficient, more equitable and more business-like system available. It is useless to commute statute labour and retain fifty or 150 pathmasters to scatter the money. It is a mistake to commute or abolish statute labour, and then appoint councillors as commissioners to spend the money in such a way as to make votes instead of roads.

The best method is to follow the organization of every well-conducted business. Appoint one capable road superintendent to act as manager for the council, in supervising and carrying out works of road improvement. Centralize responsibility in one man, the council acting as a board of directors.

As previously stated, the abolition of statute labour is merely a means to an end—to make room for a better system, and every municipal councillor can render his best service by having a thorough understanding of the principles that constitute that better system. By doing away with statute labour entirely, levying a rate with ordinary taxes for road purposes, centralizing responsibility in one efficient road overseer, creating a policy of building permanent bridges and culverts, doing some permanent road work each year, and caring for all roads by the systematic use of the log drag—by such measures can a township council fully justify the abolition of statute labour.

While township councils are doing something to patch and repair roads, the most important construction is now being carried on by county councils under the Highway Improvement Act. A tree is known by its fruit; and "a corrupt tree cannot bring forth good fruit." The results under county road systems have been more or less satisfactory, according to the efficiency of the organization under which they were produced. The same principles as those outlined for townships are applicable to county work; and the most important factor is the ability of the county road superintendent. There are now twenty counties of the Province building systems of roads. Returns have not been made for last year, but to the end of 1910 their expenditure has been as follows:—

Road construction and supervision	\$1,790,253 91.
Permanent bridges	476,765 49
Machinery, plant, etc.	145,743 32
Special grants to townships, villages and towns	112,674 84
Toll roads purchased	155,997 98
Total expenditure	\$2,681,435 54

Of the foregoing total expenditure of \$2,681,435.54 the Provincial contribution under the Highway Improvement Act has been one-third, or \$893,811.84. Of one million dollars set aside by the Legislature in 1901 under the Highway Improvement Act there remains, after meeting payments for the work of 1910, the sum of \$106,188.16; which sum will not be sufficient to meet the Provincial obligations to be incurred by work carried out during the year 1911, but as you are aware, a second million has been appropriated by the Provincial Government to continue this work.

Following the foregoing remarks, a series of one hundred limelight views were shown, illustrating the highway construction now being carried on in Ontario, in other provinces of the dominion, and in foreign countries, which were explained and commented on by the speaker.

FEDERAL AID FOR GOOD ROADS.

BY HERBERT J. BOWMAN, C.E., COUNTY CLERK AND TREASURER, BERLIN, ONT.

The present Dominion Government came into power committed to the policy of Federal Aid for Good Roads. On this plank of the Halifax platform we can all stand, no matter what may be our party allegiance. In the past the Canadian press on both sides of politics has uniformly condemned the old statute labour system. In lieu of this relic of pioneer days a cash payment system is necessary, and Federal Aid for Good Roads will command journalistic support in all quarters and the endorsement of public bodies generally.

RAISING MONEY FOR ROADS.

To build good roads requires money, which must ordinarily be raised by taxation. The tax should be borne by the different sections of the community, as far as possible according to the benefit received by each. Good roads throughout the

country benefit both the producer on the land and the consumer in the city, so a portion of the cost should be levied upon the urban as well as upon the rural municipalities. Moreover, the country highways are used more and more by motor cars from the towns and cities, and more expensive roads are required for this traffic. For these reasons urban municipalities should contribute towards the construction and maintenance of the highways in the adjoining rural municipalities. In the Province of Ontario, however, as now organized and administered, there is no tax on city municipalities for country roads. A remedy for this resulting injustice is supplied by Federal Aid for good roads. Through it all classes will contribute towards the building of the King's highway. The splendid roads of England, France, Germany and other European countries are, as a rule, built and maintained by the national governments under expert supervision. In the United States the Federal Government has for years maintained the Office of Public Roads in connection with the Department of Agriculture. Through this office, expert engineers are supplied free of charge, and object-lesson roads are built in those counties assuming county road systems. Large sums are voted by different states for building good roads, and the cities, moreover, not being separated from the counties in which they lie, contribute towards the county rates, so that there the farmers do not carry all the burden of maintaining the highways. The City of Buffalo, for instance, has already contributed towards the building of roads in Erie County over a million dollars, and pays, besides, its share of the \$50,000,000 voted a few years ago by the State of New York for good roads. For these reasons contributions from the Federal treasury are less necessary in the United States, and yet several bills are now before Congress for this purpose. In Canada, however, no better way can be found to defray the cost of building and maintaining roads than by annual appropriations from the surplus revenue of the Dominion.

GRANTS TO PROVINCES.

When the large delegation waited on Premier Borden on February 8th he assured us that the Dominion Government would make substantial grants to the nine provinces for highway improvement. If \$1.00 per annum for every man, woman and child is given for this purpose the total sum to be voted by Parliament would be about \$8,000,000. This amount could hardly be expended to advantage this year as we are not prepared as yet for such extensive operations; probably one-half of this amount would be sufficient. However, if one dollar per head of population is considered a reasonable sum, it will be safe to say that \$50,000,000 will be required for good roads within the next six or seven years. To divide this grant fairly between the different provinces should not be a difficult task. Some provinces have greater need of good roads than others. Where agriculture is the chief industry, improved highways are very essential; but where lumbering, mining or the fisheries are principally depended upon, the need is not so great. In the new country, branch lines of railroad rather than roads are in great demand. Some of the older provinces have splendid water transportation but require improvements to canals and harbours, the deepening of river channels and other public works. By attention to the peculiar needs of each section Parliament should have no great difficulty in apportioning the good roads grant, those provinces that do not require as much money for improved highway transportation being compensated in some other way.

EFFECT IN ONTARIO.

On the basis of one dollar per head of population, it would be reasonable to expect the sum of \$2,000,000 per annum as our share of Federal aid for good roads in Ontario. Half of this sum might be used to build and maintain a system of Provincial Highways, one great road to connect Montreal and Windsor, with branches touching all the counties to be added as soon as possible. New Ontario would continue to be developed by colonization roads as at present, but on a more extensive scale.

The county road systems in Ontario should receive the benefit of the balance of the Federal grant, namely, \$1,000,000 per year. The Provincial grant of one-third for county road work has been found to be entirely too little in the past. Federal aid will enable county roads to be built on a just basis in the future, with the burden shifted from the farmers' backs. In Massachusetts the State Highway Commission builds the roads and the county repays 25 per cent. of the cost. This generous treatment of the farmers, it should be remembered, is given by the state without Federal aid. Surely with Federal aid a certainty, we can better afford to be just to the rural municipalities in Ontario.

COUNTY ROADS IN ONTARIO.

A fair division of the cost of County Roads in future would be:—

One-half payable by Dominion.
One-quarter payable by Province.
One-quarter payable by County.

With forty counties in Old Ontario, this would mean an annual expenditure in the average county of \$50,000 per year. One-quarter of this (\$12,500) would be added to the county rates, or if the County Council found it necessary, this amount could be raised by debentures guaranteed by the Province and sold direct to investors in the mother country instead of being peddled around to our local people at a comparatively high rate of interest.

CONCLUSION.

Proper supervision of this great national undertaking is absolutely necessary. Let the Dominion Government establish a highway commission with expert engineers to advise the provinces how to proceed and to inform Parliament of the results obtained.

Let our Ontario Government establish a highway commission or a department with a minister at the head of it. Then employ engineers to assist the counties in building roads adapted to their needs. This will be a simple matter in some counties, but in others it will call for the most careful consideration. Adopt as a motto for the future, "Be sure you are right, then go ahead."

SECOND DAY.

Tuesday, February 27th, 1912.

Morning Session, 10 o'clock.

The President in the Chair.

A number of resolutions were proposed and referred to the Committee on Resolutions.

WIDE TIRES.

MR. CHAS. BUSH, speaking to a resolution respecting width of tires, said: I believe it is possible to obtain an adjustable tire; I know in the States there is an adjustable tire which can be easily attached to any wheel, and can be obtained for \$2 or \$3 a tire, so that the objection to using specially constructed wagons is overcome in this way. As far as I understand the Act, the townships have not the power to pass a by-law in this particular, but it is certainly up to the county councils. We think as stone roads are built this question should be considered, and it is much better for the counties to take it up on behalf of the townships where they are building permanent roads and carrying out similar improvements.

ADDRESS.

HON. J. O. REAUME, Minister of Public Works of the Province of Ontario, was introduced to the meeting and spoke as follows:—

I assure you, gentlemen, that I am delighted and pleased to meet with so many of the stalwart citizens of this Province, so many men interested in the great Good Roads movement. This is a practical and important matter. It is only 125 years since we had no roads here, when the first pioneers came and settled; since then we have made a large expenditure in Ontario, and we find we have to make a larger expenditure in New Ontario.

Very nearly fifty years ago the people became infatuated with the idea of railways. Railways are certainly a desirable thing, but the question of roads is now coming to the front and will continue to do so until we get such roads as are suited to the needs of the country.

I am here for the purpose of telling you that I am hand in hand with you in the road movement, that we will co-operate with you, and we expect you to co-operate with us, that this work may be carried on with the best motives and with the best opinion of the country behind it.

I have practised medicine for twenty years, and many a time the patient has had to wait till I could get to him, and perhaps he got better in the meantime. (Laughter.) I never was so much impressed with the necessity of good roads as I was this fall, when the elections were on. We had an election, and I wanted to get round and see my people; they wanted me and I wanted them. My time was taken up at the beginning of the session with my Departmental work, then I was called into other counties, and by the time I came to my own county I could not get through it, I could not see anybody, and I think if we had had good roads I would have had a larger majority.

You gentlemen who are interested in this movement will remember that some years ago we voted the sum of one million dollars for good roads. Over \$900,000 of that has already been spent; and we have just brought a Bill into the House providing for another million to meet obligations where the good roads are already started, and to be prepared for those who in the future will undertake this work. I know it is important that some counties in this Province should look after drainage. They have to construct drains to meet the requirements of the locality, and I am told that as soon as that is attended to they will take up the good roads scheme.

On many matters connected with the making of good roads there is great diversity of opinion. We have a staff of officers, and I claim to have a good engineer and good assistants, and we are providing a larger staff, for the question of roads is becoming one of popular interest. The demands for help and advice are getting greater and greater, and the staff will always be at your disposal for consultation and help.

I know of some counties that are willing and anxious that we should pay one-third of the machinery. They want to buy fourteen crushers and no roller. You know what the result will be—they mean to lay the stone loose on the road, and you will not have good construction. I want to impress upon the counties and upon the people who are here that you ought to provide adequate machinery; you not only want stone crushers, but you want rollers, and good ones at that.

We are organized, but we need a little better organization in some of the counties where the work has been going on. In some counties one county councillor is the boss of the job; next year somebody wants his place, and you have a new boss. That plan has not proved satisfactory, and it is well to have a permanent organization, with an engineer or a superintendent who understands the work.

We are also providing that the people shall have a detailed statement every year. Whether it is \$30,000 or \$40,000, or even if it is \$15,000 that has been spent, the people are interested in knowing how much has been spent and where it has been put on the roads. In the Department, when we find that \$15,000 or \$20,000 has been spent and no details are given, we will require in future that all the details should be given in the county where the work is going on.

Various counties have different methods of meeting the cost of the construction of their roads. Some want to issue debentures for a certain number of years. In this you know your own business; you know the situation in your own county, you know what is due to the people you represent, and you can make up your minds whether it is better to issue debentures for a certain number of years or pay as you go.

I suppose you will expect me to say a word about Federal aid, and as soon as I have any information about it I will be glad to give it to you. We are advised that Federal aid will be given to the various Provinces, and the news is extremely welcome; but I do not know what plan will be followed, what roads they want, or where the roads are to be, and until we know all this I am not in a position to speak. The Government of Ontario will be ready to co-operate with them; there are only the details to be arranged, and once we get the money the rest will be easy. Whether it is advisable that there should be trunk roads, and whether the people who are benefited by these roads should be called upon to pay a share of them, are questions that I would like very much to have the members of this association discuss. I would like very much to know what the people wish to have done.

I did not come to make a speech, just to see you, and to tell you that I am fully in accord with you. In this Province we have had on the statute book what

we call the Colonization Road Act, for use where the people are not organized into counties. Under that Act we are going into a certain number of trunk roads, and if the Dominion Government wants to be interested in them they will be welcome. It would be a good idea for them to take an interest in the maintenance and construction of these roads.

We are going to be much more particular in the future than we have been in the past in regard to county roads, and we are going to insist upon proper roads, proper maintenance and proper machinery, and not a mere rough throwing of gravel upon the dirt and calling that a good road. You expect us to pay one-third, we want the roads, we are willing to be partners with you; but we want better roads, and we are going to have stricter inspection. It is pretty hard to keep watch on all the work that is going, but we will have to provide ways and means of keeping in close touch with it.

I thank you, gentlemen, for your kind attention. (Applause.)

MR. L. A. HAMILTON, Lorne Park.—I desire to move that a vote of thanks should be tendered to Hon. Dr. Reaume for the address which he has given us. We are indebted to him for the very valuable work which he has put in practice from year to year. We are all anxious in the country to see a different system adopted than that which has been in existence, and we are taking a forward position in connection with roads; we are anxious to take a different position, that is, that the work should be taken out of the hands of non-experts, and put into the hands of experts. Where are we going to get our experts from? In France they have a college run by the government for the express purpose of educating men for this purpose. What I suggest is that the Department of Agriculture should give a series of short courses in the College at Guelph, and I think that the Minister might take into his consideration whether it would not be possible in connection with the School of Science to give some such short course to our men who are in the country, and which would give some of us farmers an opportunity to get a little more scientific instruction. It is one of the great difficulties that the men who are engaged in the laying out of these roads have to contend with. I know of a case where the water was flooding the road, and we were told that it could not be drained, as, of course, it was impossible to make water run up hill. I took the levels and found a fall of three feet. The instrument, which won't lie, showed the possibility of taking the water away, and the work was done at a very small cost indeed. This is just to show the necessity and advisability of some little scientific instruction being available.

HON. DR. REAUME.—We have had this matter in mind and have been discussing it in the Department. I do not know to what extent we can carry on the work in Guelph, but we would be very glad to meet with the University of Toronto, or that department of the University which deals with applied science. I have not asked our engineer, Mr. McLean, but have no doubt he would be glad to give a short course of lectures. I thank you for the suggestion.

MR. SHEPPARD.—As a man who has had a good deal of experience, I think the line taken by Mr. Hamilton is all right up to a certain point; but there is a big difference between a practical man who can superintend men with a pick and a shovel, and a college engineer. There is such a wide difference in the work that I do not believe that you can combine them; an engineer is distinct from a superintendent. The work on the modern highway has got to be more difficult, and the question of drainage presents difficulties too. So far as running lines and giving levels is concerned an engineer is all right, but the foreman is the man upon whom the responsibility of the work must rest.

ADDRESS.

W. G. TRETHEWEY, Esq.

THE PRESIDENT: I want to introduce Mr. Trethewey, a member of the York County Highway Commission, and one of the foremost men in the Province.

MR. TRETHEWEY: The chairman does me altogether too much honour when he says that I am one of the foremost men in the Province. I am just now in a position that I would rather like to shirk. I am quite willing to do all kinds of work, but to make a speech I cannot. It struck me when discussion was going on as to the technical part of road making, that if there was any place where we could learn speech-making I would like to go.

It is two or three years ago since we started to talk good roads, and then perhaps you could get one man in four to listen to it and endorse it. Now, I believe that if the question was put up to the people they would heartily endorse it, and that they would submit to a special tax for part of the money at least.

This question was taken up first by the Ontario Good Roads Association, it was endorsed by the Board of Trade of the city of Toronto, and I believe the city of Toronto was the first city in Ontario, if not in Canada, to authorize money to be spent beyond its limits for the construction of good roads. So that the people within the city did realize that the road question is very important and that it affects them as much as the farmer. In fact, I think that they feel it more than the farmer, because when they had a vote taken on the question it passed by a majority of 100 per cent.; I believe the vote was 13,000 to 8,000 in favour of a good road system round the city of Toronto.

I listened with a great deal of satisfaction to what the Honourable the Minister had to say. I took it that both the Provincial Government and the Dominion Government are desirous of carrying out the wishes of the people. It is simply up to these men who represent practically the entire country to work out the plans on which the Governments and the counties may join hands and work out a system of highways which will forever put away the undesirable conditions that we have to-day. I think that if we who are here advise the Government, that it will be willing to carry out our wishes. I believe that the most practical way to do that will be to suggest that men be appointed representative of the governments and representative of the counties where that work is being done. For instance, we might say that the Provincial Government have two representatives, the Dominion Government two, and each county two where the work is being done. Thus by a system of that kind there never can be any mistakes made. As things are now, as the Honourable the Minister has pointed out, you have the men changed every year. One council goes out and another one comes in, and there is a new set of road builders who are all more or less experimenters, and who want to do it another way. The man in charge of the work, whoever he be, should be permanent, so that you are not going to lose the results of one year's experiments in the next. I think that is the only practical way to do work of this kind.

There should be a percentage set aside for maintenance, because maintenance is more important than the road construction. What I mean is that if you do not maintain your road after it is constructed the money spent is practically wasted. "A stitch in time saves nine," and the moment a road begins to go to pieces and the water begins to get in, it is bound to go in a very short time. Have a man stationed here and there: all the machinery he requires is a pick and shovel and

a wheelbarrow. If he finds a weak spot in the road he mends it at once, and in this way a large extent of road can be kept in repair at a very small cost. The greatest cost that you have is the money that you lose through roads going to pieces. It simply means reconstruction entirely with heavy and expensive machinery.

It strikes me that the way tonnage is carried on narrow tires is one of the greatest causes of the destruction of roads that can be, and I would suggest in your resolution, whatever it may be, that you should incorporate a suggestion to the Government to bring in a wide tire act. Not to let it work in such a hardship on the people, let it come in gradually; begin with the manufacturer, providing that vehicles intended to carry a certain tonnage shall have tires of a certain width.

I think that is a suggestion that the Government will be only too glad to carry out; they will have to work it gradually, so that a man that has a rig will not be compelled to buy another one, but when he does buy a new one that it will have a tire that will be suitable and will comply with the Act. What we want is to start this movement right; I am satisfied that it is going ahead, and what we want is to start right now.

Of course, the Government has told us over and over again that it is poor, that it has no money for road building, or very little. I think that lies entirely with ourselves, and I think the revenue can be raised. Toronto, one of the largest cities in Canada, has declared that they are prepared to be taxed for road construction. What I would like to see, and I think it would be in favour with all of us, is a show of hands as to whether we are in favour of a direct tax for this purpose. Supposing the Government were to impose a direct tax of one dollar a head for highway construction, that would be a mere bagatelle to each of us, but it would be a lot of money in the aggregate. We would have between two and three million dollars. With the permission of the chairman I would just like to have a vote as to whether or not this meeting would be in favour of a direct tax on the people for at least a portion of this amount. I am asking this audience to declare itself by a show of hands.

MR. TALBOT: Can a man vote intelligently on that question until he knows where and how the money is going to be spent? I think it right that we should come here to receive impressions from other men, not try to force our ideas on other men. I would like to have the privilege of expressing my ideas and then let the meeting decide freely.

MR. TRETHEWEY: I am very glad you have spoken as you have, for it gives me an opportunity to say something else. We were down at Ottawa asking the Dominion Government for substantial aid, and one of the resolutions or requests was that the Dominion Government should make a substantial grant to the Provincial Government for road construction, that this grant should be handed over to be expended upon these roads. Now, I take it that the Provincial Government is better able to keep house than an outsider, and better able to regulate its affairs than an outsider. I take it that the Provincial Government knows the wants of the people better than the Dominion Government, just because it is in direct touch with all these people; therefore it is reasonable that the money should be handed over to be spent by the Provincial Government in addition to any other moneys supplied by the Province for road construction.

MR. TALBOT: I must take exception to the stand the speaker takes on this question that the Federal Government should pay this amount to the Provincial Government. The question came up at a general meeting at the City Hall, and I

got up and I said that the County Councils are the ones that know the wants of the people best, and they are the people that should spend this money. It is all right to have the Federal Government deal with the Provincial Government and let the Provincial Government deal with the people; that is, with the County Councils, who know the wants of their people.

Now, that was the stand that was taken. That was the stand that was received with applause at that meeting, and I do not understand applause unless it means that that is the idea of the meeting; in the face of that the resolution went through and the thing was sidetracked, and instead of speeches that were supposed to represent the feeling of the men that were there, we had speeches that were made and typewritten weeks before. Now, tell me, were those the ideas of that delegation, or were they the ideas of a few of these men.

THE CHAIRMAN: Mr. Trethewey is asking what your views are on the question of a direct road tax. I do not myself see any objection to Mr. Trethewey having a show of hands if he wants it, but I take the same ground as Mr. Talbot, that we cannot vote intelligently unless we know to whom the spending of the money is going to be entrusted.

MR. TRETHEWEY: As far as I knew at Ottawa I did not know that there had been any speeches made there that were not in accordance with the feeling of the convention. The representation that I was called upon to make was the one that had been passed by the associated Boards of Trade of the Province, and as far as the speech was concerned I simply said a few words introducing it. The present discussion is as to whether there should be a direct tax. I believe the cities should pay their share of the cost of highway construction. Good highways will reduce the cost of living because they will reduce the cost of transportation into the city; therefore, though I would like to see the feeling of this meeting favourable to that, it does not count for anything, and I won't be disappointed should the thing be turned down. I would like to have a show of hands on that.

A DELEGATE: Do you think that we are in a position to deal with a question of such magnitude; it is a very important question indeed, and we do not want to commit ourselves.

ANOTHER DELEGATE: Are you going to levy a poll tax? I do not think we ought to have a poll tax; I do not think that we have reached that point at all; we have not exhausted other sources of revenue.

ANOTHER DELEGATE: I think we ought to have an abstract motion before the chair; there is absolutely nothing before the chair now.

THE CHAIRMAN: Leave it to the Committee on Resolutions.

MR. TRETHEWEY: I do not think that anyone has anything to fear from the automobiles.

A DELEGATE: An automobile is taxed \$4 a year now.

MR. TRETHEWEY: That is merely a license for the privilege of running. I do not want this to disrupt the meeting; I was going to say that the automobilist is perfectly willing to pay his share; if a tax is imposed on his automobile for the maintenance of good roads, the automobilist is the first man to come forward and say, "Here is our money." The automobilist is paying a big tax already to the revenue of this country and he is willing to pay more; he is willing to pay his share, but you must give him a fair deal and give him good roads. He does not want to pay his money into the coffers of the Government and get only a promise that the money is going to be used for the purpose of creating good roads. The

matter has been discussed, and fifty cents a horse-power has been the basis arrived at, and motorists are perfectly willing to pay it.

As to their rights upon the road, we have an association here in Ontario known as the Ontario Motor League. The members of the Motor League are cautioned, and cautioned frequently, as to how they act on the highways, and have done a great deal to bring about a better feeling between those who drive teams and those who drive automobiles. The purpose of that League is to do good, so that the rural people and the city people may understand each other better. If there is a bill brought in for the purpose of taxing automobiles and the money is to be used for the purpose of making good roads, I do not think it will have any opposition from that quarter.

I think that the automobilist has put more money in circulation in a shorter time than anything else that has come to the people; if there is anyone in this room has any doubt about that, just pay a visit to the Armouries; they tell me there is one exhibit there that cost over a million dollars, and the growth of that industry in six or seven years is simply marvellous. The people in the country as well as the people in the city ought to press this good roads question through: the whole people of Canada are interested in it, and automobiles, in my opinion will before long get so cheap that even the farmer will be able to own one, and will own one. I venture to say that in ten years from now half the farmers will own automobiles, and then nothing can stop the good roads movement. The automobile and the gas engine have done more for the highway movement than anything else that has come to us.

PROGRESS OF STATE AID IN THE UNITED STATES.

BY PAUL D. SARGENT, ASSISTANT DIRECTOR, UNITED STATES OFFICE OF
PUBLIC ROADS.

The first state-aid law in the United States was passed twenty-one years ago. To-day thirty-seven of our forty-eight states have some form of state-aid law. Prior to 1891, highway conditions and highway administration all over the country were about as bad as they possibly could be.

Starting in a small way in that year, by the passage of a state-aid law in New Jersey, the movement has developed by leaps and bounds until to-day we can point to about 200,000 miles of improved highways within the country. The medium by which the most of this improvement has been brought about is what we term "state-aid." This means simply the co-operation of the state governments with their various political sub-divisions in planning, constructing, and paying for highway improvements. The idea of local self-government, upon which our whole political system is based, was nowhere more strongly entrenched than in respect to road administration, and probably in no other line of endeavor has it been such a failure. In practice, it resulted in placing in charge of our roads men entirely lacking in knowledge or experience necessary to enable them to intelligently plan and direct the work. The popular man who could control votes was usually selected for the position of road commissioner. After holding office for two or three years the people would decide it was time for a change, and then when this man had learned enough to begin to do things intelligently he would be cast aside for another. One influence of state-aid has been to discourage the promiscuous selec-

tion of men to take charge of road affairs. The people are learning that road building is an art based on a science, and that trained men and men of experience are necessary to secure the best results from the expenditure of road funds.

Most of the state-aid laws, as originally passed, recognized this idea of local self-government by providing ostensibly for a considerable amount of co-operation on the part of local officials. Their co-operation has generally consisted of a voice in locating work, deciding on plans, and a few minor points. The work has always been really guided at every point by the state highway commission, and, after a few years' experience, communities have learned that the state commission was so much better equipped to handle the work and to pass on all points, that the people have been not only willing, but glad, to relinquish substantially all control over state-aid roads to the state highway commission. A careful examination of a few state-aid laws and amendments thereto will substantiate the statements just made. Let us look at a few of these laws, not only to note the transition from local to state control, but also to learn the leading provisions of the laws themselves.

The first law establishing state-aid in road construction as we know it to-day was enacted by the State of New Jersey in 1891. This act, however, remained inoperative until amended the following year, when the administration of its provisions was placed in the hands of the president of the state board of agriculture and construction was begun, a sum not to exceed \$15,000 per annum being available. The initiative for state aid was dependent upon the local communities. Two-thirds of the property-holders along at least one mile of road were required to petition the board of chosen freeholders, binding themselves to pay 10 per cent. of the cost and praying for state-aid in the construction. Surveys, estimates, etc., were prepared by the local county board. The only voice the commission had was in accepting or rejecting the petition for state aid; consenting to or rejecting contract for construction when let; and in accepting or rejecting the completed work. The state paid one-third of the cost of construction and the county paid 56 $\frac{2}{3}$ per cent. of the cost. The cost of maintenance after construction devolved on the county.

Various laws amendatory to and providing for the better operation of this state-aid law have been enacted from time to time. These provide for the issuance of bonds by the counties to pay for their portions of the cost of the roads, for the acquirement of property for road purposes, for the acceptance of roads as county roads which have been improved without state aid; for the joint improvement of roads on county lines or lying in different municipalities, and for the maintenance and repair of roads by contract.

In 1894 the duties of administering the laws were placed in the hands of a commissioner of public roads, appointed by the Governor for a term of three years. Later, in 1900, the personnel was increased by the appointment of a supervisor of roads.

None of the changes made in the state highway law have been of a radical nature, but rather additional steps toward the perfection of the original plan. The discretionary power which the commission possesses in approving or rejecting applications for state aid has been used to good advantage in securing proper engineering supervision as well as maintenance of the completed roads.

Massachusetts followed New Jersey, and, in 1892, its legislature created a commission to investigate the subject of state aid and to report to the succeeding legislature. Based upon the report of this commission, the legislature in the next year enacted a law which, with a few amendments, has been in force ever since. This law stands out in marked contrast to most state-aid laws, inasmuch as it

grants practically plenary powers to the commission over all matters connected with state roads.

The law provides for a paid commission of three members who shall devote their entire time to the work of their office. A complete force of engineers and clerical assistants is also provided by the law.

Work is initiated upon petition of the county commissioners of a county or the municipal officers of a city or town. After hearing a petition, if the commission decides to take over the road as a state road, complete jurisdiction over the road, with the exception of police powers, thereby passes to the commission. All surveys, plans, and estimates for the reconstruction of the road are made by the commission, and they are also empowered to change the location and grade of any road. Contracts are let by the commission and the work is supervised by their engineers. Substantially the only prohibition in the law is that the commission shall not build over ten miles of state road in any one county in any year. One fourth of the cost of construction is assessed against the county in which the road lies and must be repaid to the state within six years with interest at 3 per cent per annum. in such installments and at such times as the state highway commission shall determine, having regard to the financial condition of the county. The money so repaid shall be applied to the appropriation to be expended by the state highway commission.

The commission has charge of the maintenance of state roads, but it is allowed to assess against each city or town in which any state road is located \$50 per mile per annum, as a maintenance charge, the state bearing the remainder of the expense. During the earlier years a considerable amount of maintenance work was done by contract with individuals or with the towns in which the roads were located, but during the last four or five years most of the maintenance work has been done by forces organized by the commission.

The one feature of the Massachusetts law which savors of not removing the work entirely from the localities is a provision giving cities and towns the preference in the matter of contracting to do state road work within their limits. Any city or town, if its officers so elect, may take a contract at the estimated cost of construction made by the commission. The city or town may also bid on maintenance work to be done by contract.

Under this system of centralized control the Massachusetts commission has devoted its attention to the development of a system of main thoroughfares traversing the state from north to south and from east to west and connecting all the principal centres of population. Of necessity, some of the smaller towns have been left out of this trunk-line system, and after the law had been in operation for a few years the legislature provided, by an amendment to the law, as follows:

In towns of an assessed valuation not exceeding \$1,000,000, the commission shall allot for, and expend in such amounts as it may determine, 5 per cent. of the amount appropriated each year for the construction of state highways, to be used in constructing and repairing highways therein, and it shall not be a condition precedent that such towns shall make any appropriation in excess of the usual annual appropriation for highway purposes to become eligible for expenditures under this provision. Said commission may also allot for and expend in such towns for like purposes, in addition to any expenditure hereinbefore provided for, a further amount of 5 per cent. of said amount appropriated, if such towns appropriate or contribute an amount equal to the amount allotted by the commission. A like amount of 5 per cent. may be allotted and expended by said commission each year in towns whose valuation exceeds \$1,000,000, if such towns appropriate

or contribute an amount in addition to the average annual appropriations for repairs of highways in such towns for the preceding five years, exclusive of appropriations or contributions under this provision, equal to the amount allotted by said commission. No town of less than \$1,000,000 valuation, and which makes no appropriation under this provision, shall receive in any one year more than 40 per cent. of its average annual appropriations for highway purposes for the preceding five years, provided that said commission may allot in any year a sum not exceeding \$400 to any such town, the said annual average appropriation of which does not exceed \$1,000. Such allotments shall be made only on petition of the select men of the town, but a highway constructed or repaired under this provision shall not thereby become a state highway. After a highway has been improved under this provision by said commission, it may expend such sums as it may deem necessary for the maintenance and repair thereof, in accordance with the foregoing provisions for said commissioners to contract for such repairs.

The following provision gives us a fair idea of the complete authority vested in the highway commission over the management of state highways, and is fairly indicative of their complete control of every feature in connection with the improvement of state roads:

No length of possession or occupancy of land within the limits of state highways by an owner or occupant of adjoining land shall give him any title thereto, and any encroachments upon said commission shall be forthwith removed. No state highway shall be dug up for laying pipes, sewers, wires, railways or other purposes, nor shall any trees be removed or placed thereon without the written permission of the highway commission. The state commission shall name and may change the name of state highways, and shall erect suitable guide posts along same.

Other important provisions of the law are as follows:

The highway commission has exclusive care and jurisdiction over all shade trees, shrubs or growth within the limits of state highways, and may trim or cut such trees or license others to do so. A penalty of from \$5 to \$100 is provided against any one who shall so trim, cut or remove such trees, shrubs or growth without authority.

Whenever a grade crossing is established upon a state highway, county highway or other highway which has been petitioned for as a state highway, said highway shall be so constructed that there will be a clear view in each direction for at least one hundred feet from the centre of the said highway, whether the same passes over or under the railway, unless the proposed plan for the abolition of the grade crossing is approved by the Massachusetts highway commission.

Since 1909 the commission has had charge of the licensing and regulation of all automobiles and motor vehicles owned in the state of Massachusetts, and a good portion of the commission's time is spent in sitting at a court to hear cases of violations and infractions of the law. The fees and fines accruing under the law are used, first by the commission for such expenses as may be authorized for carrying out the provisions of the law and regulating the use of motor vehicles, and the balance is expended by the commission for the maintenance of state highways, without specific appropriation by the legislature and in addition to all sums before appropriated or to be appropriated hereafter.

Connecticut affords a good example of the transition from joint to centralized control and authority over state road work. The first state-aid law in Connecticut was passed in 1895. This law was general in its scope and provided aid for such towns in the state as made appropriation of their own funds and applied to the state highway commissioner for state aid. The municipal officers of such towns

as made application for aid recommended to the state commissioner one or more roads upon which, in their judgment, the improvement should be made, and the state commissioner, in conference with the municipal officers, finally decided on the location to be improved. This provision, with minor amendments, remained in force for twelve years, liberal appropriations being made by the state each year, and a considerable amount of improvement taking place. The sections of improved road, however, were disconnected, and during all these years no particular system of roads had been developed. In 1907 the whole state law was radically changed. The location of future improvements was placed in the entire charge of the state highway commissioner. He was provided with an adequate force of engineers, and the law specified that all contracts for construction should thereafter be let by the state highway commissioner, and that the supervision of the work should be under his sole direction. The maintenance of all state roads, too, was placed in the hands of the state highway commissioner. Prior to this time, the municipal officers had exercised a joint control with the state highway commissioner in every step of the work. Local engineers had been employed at the various towns to make surveys, the contracts had been let by the municipal officers of each town, and very often someone of the municipal officers had acted as inspector of the work. In 1907, at the time these radical changes were made, the state also designated a system of trunk lines, and directed that future highway expenditures should be used in completing these trunk lines.

New York affords an example of complete transition from local to centralized supervision, and, in many respects, I think, possesses the best system of road laws on this continent.

Up to 1898 the roads in that state were built and maintained entirely by the counties and towns. The legislature of that year passed two laws, one known as the "Fuller Plank or Money System Act" and the other known as the "Higbie-Armstrong or Highway Improvement Act." The former had in view the ordinary repair of the public roads of the state, while the latter contemplated the gradual improvement of a system of stone surfaced roads connecting the various county seats, cities and larger villages throughout the state. It also provided that the towns electing to adopt a system of cash road taxes, in lieu of labor tax, could receive from the state 25 cents for each dollar so levied and collected locally, which amount was increased to 50 cents on each dollar in 1902. This was a powerful incentive to the abolition of statute labor and the raising of a cash road fund, as is shown by the fact that in 1899 only \$34,517 was paid out under this act, while in 1906 \$1,057,605 was paid out for that purpose.

The Higbie-Armstrong law pro-rated the cost of stone surfaced roads, built thereunder at 50 per cent. by the state, 35 per cent. by the county, and 15 per cent. by the town. Petition for this aid originated with the board of county supervisors, whereupon the state engineer and surveyor was required to prepare plans, specifications and estimates of cost, and, if approved by the county board and local funds were available, to award contract and supervise the work. The roads thus improved were to be maintained by the town under directions from the state engineer and surveyor. An appropriation of \$50,000 was made under this law in 1898, which amount was increased annually thereafter.

The idea of state aid was so popular and the results of the expenditures under the law were so beneficial that in 1903 a resolution was adopted by the legislature proposing an amendment to the constitution authorizing a state bond issue of \$50,000,000 for road improvement. This resolution was adopted by the legislature of 1905 and ratified at the general election in November of that year. In 1907 the

legislature adopted a plan whereby the counties paid 2 per cent. of the total cost of a road for each \$1,000 of assessed valuation per mile of road in such county, and the towns paid 1 per cent. of such cost for each \$1,000 of assessed valuation for each mile of road in such town. That legislature also appointed a committee to prepare a revision and consolidation of the highway laws of the state, and upon the recommendation of that committee the law under which the state now operates, excepting subsequent amendments, was enacted. It became effective January 1, 1909. This law provided for a highway commission, consisting of three members, and for a system of state roads amounting to more than 2,800 miles, to be improved and maintained solely at the expense of the state. It also provided for state-aid in the improvement of county roads, comprising more than 7,500 miles, by joint aid of the state, county and town, and for the improvement of the remaining 70,000 miles of town highways by co-operation between the state and towns.

Under this law the state commission has supervision, directly or indirectly, over every mile of public highway in the state. The state is divided into six divisions, each in charge of a division engineer, whose duties are confined solely to the improvement and maintenance of the state and county roads, having no connection whatever with town highways. The funds for town highways, although expended locally, are under the direction of an official of the state highway department. Improvement of the state and county highways is carried on wholly by contract, the highway commission preparing the plans, specifications, and estimates, which, in the case of county roads, are submitted to the county boards of supervisors of the respective counties for final approval, and the highway commission accepts or rejects the improvement when finally completed. The maintenance of the state and county roads is under the direction of the first deputy of the commission. Provision is made whereby the commission is authorized to adopt a system of patrol for maintaining state and county highways, or to adopt such other system as may seem expedient, so that each section of such highway may be kept under constant observation and effectively and economically maintained. The commission also has power to purchase the materials for such maintenance and repair and contract for the delivery thereof at convenient points along such highways. In 1911 this law was amended providing for a reorganization of the state highway commission through the appointment, by the governor, of a state superintendent of highways, who, together with the state engineer and surveyor and the superintendent of public works, are made to constitute the state commission of highways.

New York State has spent more money and has built more roads through the operation of its state highway department than any other state in the Union. Up to December 31, 1910, there had been improved 13,401 miles of state-aid roads and 2,225 miles of trunk line roads, making a total of 15,626 miles of roads improved under the state highway department. During 1911 there were available for expenditure for state-aid \$5,000,000 and for trunk line construction \$6,000,000, so that up to December 31, 1911, there had been expended from state appropriations \$30,223,265. More miles of improved roads have resulted from the operations of the state highway department in New York than from that of all the other states combined, due to the large appropriation at its command.

Pennsylvania affords another example of transition from more or less local to centralized control over state road work. The original law passed in 1903 provided for the payment of state aid to such townships as would make appropriation from their own funds and apply to the state highway department for aid. Plans and specifications were made by the highway department, contracts were let, and the work was supervised by the department, but no systematic scheme of improvement

was provided for by the law. In 1911 the legislature repealed this law and passed a law providing for a complete reorganization of the highway department, and designated a complete system of state highways to be built and maintained at the sole expense of the state.

The law also provides for the continuation of the state-aid principle for such townships as are not included in the trunk-line system.

Various other methods of granting state aid besides those already outlined are also in operation, for example: Alabama, Minnesota, Michigan and Washington have laws extending both money aid and advice and engineering assistance. In these states the plans and specifications are either prepared by the state highway department or by the local officials, subject to the approval of the state highway department. North Carolina, Iowa, and Kansas furnish only engineering advice and assistance; while Georgia, Wyoming and South Carolina furnish only convict labor. Georgia has more than 4,500 state and county convicts at work upon its roads each day under county supervision. Illinois, Louisiana, Virginia, New Mexico, Arizona, Colorado, North Dakota and California furnish both convict labor or road material prepared by convict labor, money aid, and engineering advice and assistance. In the case of Illinois, crushed stone prepared by state convicts is furnished f.o.b. cars at crushing plant to such towns as will pay the freight on the stone and use it in road improvement. California furnishes crushed stone prepared by convicts to the towns at the cost of production plus 10 per cent. Delaware has an extremely local system of state-aid. Under the law of this state, \$30,000 is appropriated annually and divided equally among the three counties. A state highway commissioner is appointed for each of two of the counties and a county highway engineer for the other county, each one having authority over the roads within his county independent of the others.

Michigan has what is known as a state reward system. Under this law, the state pays from \$250 to \$1,000 for each mile of improved road constructed in the state which measures up to the standards prescribed by the state highway law. In improving the roads, however, to which this reward is extended, plans and specifications are prepared and all work is done by the local authorities and when completed is inspected by the state highway department, and if found to measure up to the standard of construction prescribed the state's reward is extended.

The salient feature for us to remember is that the idea of state aid is fast spreading over the entire country. In nearly every one of the eleven states which have not yet created state highway departments or granted state aid, the friends of highway improvement are busily at work preparing bills to be laid before their legislatures, and within the next three years I shall expect to see a state highway department and state-aid law in operation in every state.

I had hoped to be able to present figures showing definitely appropriations and expenditures and number of miles of road improved under the auspices of state-aid by five-year periods since the passage of the New Jersey law in 1891, but, although I have been for some time collecting these figures, they are yet incomplete, and I am unable to give you this information.

There is one point which has developed in connection with the administration of every state-aid law, to which I will call your attention before closing. I refer to the maintenance of state roads after construction. It has been customary in framing a state-aid law to provide that the roads shall be maintained by the county or township in which they are located. In practice, this provision has never amounted to anything. It has been impossible to force the townships or counties to do the maintenance work. After a few years' experience, every state has found it necessary

to pass some form of amendment providing for the maintenance work of state-aid roads to be done under the supervision of the highway commission. In fact, in most of the states now, where any appreciable amount of state road has been built, the commission does the maintenance work itself and in most states collects from the county or town some fixed proportion of the cost or some definite amount per mile of road per annum. In the earlier years direct appropriations were made to take care of this annual maintenance cost, but recently the custom has developed of licensing automobiles annually, and placing the income received therefrom in the hands of the state highway commission to be expended in the maintenance of state roads. This system will undoubtedly be developed in every state, and it looks as though all of the money which can be raised from this source will be necessary to keep the roads in a proper state of repair.

While the progress already attained since the adoption of state aid in the United States is gratifying, it could be greatly accelerated in the future if many of the states would amend their present state highway laws so as to broaden the scope and authority of the state highway departments, or of the state in its participation in the highway work. As illustrated by New York, Pennsylvania, and Connecticut, the tendency at present is in this direction. The legislatures of twelve states will be in session during this year, and most of them will consider, if not pass, additional state highway legislation.

MR. SARGEANT: Before I read the foregoing paper several points had been opened for discussion and it is just possible that some of the experiences that we had in the state of Maine, before I assumed my present position, may be of use to you in solving some of your problems here.

We started in 1905 in an organized effort to do something about the roads. We first made an investigation of road conditions to find out what our problems were, and then tried to formulate a law that would meet these conditions. We found that we had 476 cities and townships in Maine; a township is about six miles square and all the roads within the limits of that are within the jurisdiction of some township or city. We found after we had all our figures collected that, in 20 cities, 8 per cent. of the roads were situated; and that 92 per cent. of the roads were outside of the cities: we found that we were raising \$1,377,000 for ordinary road repairs and that 35 per cent. of this money was raised in these 20 cities and spent on this 8 per cent. of the roads, and 65 per cent. of the money was used in keeping up 92 per cent. of the roads. The city's average expenditure was \$254 a mile, and outside the cities it was \$37.50 a mile. That showed right where the burden of maintaining the roads was, and it showed also why the roads were poor in the country.

Naturally we found these conditions worst in the poorer townships where they had not anything to build a city round, where values were low and taxation high. In our scheme of state aid we arranged for a larger percentage to be given to these poorer townships than we did to the large and wealthy cities, and it has worked fairly satisfactorily.

There was one other point we had to deal with, and that was to find out how much experience these men had who were spending this \$1,377,000. We had about 600 of them. One man had been in continuous service 34 years, two of them had been eight months. We had these 600 men trying to spend this \$1,377,000 and spending it all too, many of them without knowledge of what to do and how to do it, and I think that showed why we did not get any results, because we did not have a master hand on the job.

One thing we have got rid of over there, and that is the idea of passing the job round; as soon as we find that we have got a good man we keep him in office. Of course, when we started out we had the same idea to contend with as you have, this idea of local self-government, and they did not want to give it up. But the form of law provided that there should be co-operation in every point; the local people suggest the work and the kind of work that is wanted; after our Department has got through with it the select men let the contract. Now we are finding, after about three years, the selectmen do not want to have anything more to do with the road work.

We have 23 inspectors and these are trained men. As our friend said this morning that there is a vast difference between a civil engineer and a road builder. I grant that. These men have anywhere from a dozen to 25 and 30 townships apiece, and every town is supplied with specifications and plans of what is going to be done. The inspector goes through and helps with advice and suggestions and sees that it is done. Wherever there is a difficulty, and the men on the spot don't exactly know what ought to be done, an inspector is directed to go there, and there have been plenty of cases where the selectmen find that they really do not care to interfere. In six month's time you get a large majority of the people voting to have the Department take over the whole work. In the case of a city they have a general tax all over the city, and the money is paid into the city treasury and the city superintends all the work.

Just one word on this idea of engineers and road builders. I recognize that there is a vast difference between a trained road builder, and the engineer that does not know how to build a road. Our work is based on the science of engineering. I do not believe any one who says that you can go out and build a railroad without an engineer. Down in Washington we make a business of training men, and we take six or eight students each year and send them out. These boys pass a competitive examination, then we give them a year's experience in highway construction, and when we get through with them they are trained road engineers. The good boys we keep and it keeps us busy to keep our vacancies filled.

The difficulty for us is to keep trained men. After we have had one for two or three years some city picks him at \$2,000 to \$3,000 a year. We build what we call Object Lesson Roads; wherever a community is desirous of improving its road conditions, and they agree to supply the material, we supply an engineer. He will make a plan and estimate, will stay there and superintend the work, and in that way we are teaching the community. After a year or two the general results in that county make it very easy to carry out the rest of the work, maintenance and all, in accordance with the best roadway engineering.

AFTERNOON SESSION, 2 O'CLOCK.

Mr. Pugsley in the chair.

ADDRESS.

GEORGE S. HENRY, MEMBER OF YORK COUNTY ROAD COMMISSION.

Mr. President and Gentlemen:

I am sure it is very gratifying to the Executive of the Association to see so large a turnout as we have this year, and I feel that the discussion that has taken place has been very encouraging: we have been getting information, and will continue to do so.

What is our end and our purpose here? We represent good roads enthusiasts and we will carry our enthusiasm back to our homes. The President has asked me to say a few words in a general way; he did not even give me a subject.

Possibly I might try and point out some ways in which you might apply what you get here when you go back to your own counties. I sometimes feel, gentlemen, that we in older Ontario, as we are bound to call it in contradiction to new Ontario, don't appreciate the country we live in half enough, and all that God has given us in this fair Province of Ontario. I suppose I am speaking now to gentlemen from older Ontario; we have the cream of the land in the Dominion of Canada, and the people in the West are pleased to refer to us as the Ontario gardens. We will remain in the gardens, I am perfectly satisfied. No matter how the West develops, Ontario is bound to develop, for I am convinced that we are not producing within 25 per cent of our capabilities in this older part of the Province of Ontario.

What is the reason? We pride ourselves on our 200 acre farms, when possibly if we had 25 or 50 acres we would get much better results. Another perhaps will tell you that the better class of the community leave the farm and go to the centres of population. Possibly that is the explanation of the question, and that we are spreading ourselves over too much land. To my mind as the roads get better it will raise the standard of the class that remain on the farm; that is what we want, and what we must have. I have jotted down two or three why's and where's and how's of the good roads question. We want to get a better class upon the farm and increase our land values, along the line that if we don't we will be land poor, for we do not prize our property enough; if the land cost us twice as much we would be bound to make it yield us twice as much and it is quite capable of doing it.

Then, of course, we have the high cost of living, and that applies to the farmer as well as to anybody else. His supplies cost him just twice as much as they used to do; and a great deal of the expense of transportation over the country highways has increased the cost of foodstuffs to the consumer. I know counties that have assumed the roads and have improved them, such as Wentworth, Hastings and Middlesex, and I do not think that I have ever heard that they feel like going back to the old system. We that have not got as far as they have are encouraged by the enthusiasm of the representatives from these counties. We have a regularly organized road system which has been put in a good state of repair; no one appreciates what a good road is till they drive on it and then drive on a poor one.

Now, it is necessary for us to centre not only our ideas and our energies upon the county roads, but we must also extend the same to the township road. Every man is entitled to a good road at his door, and we do not have to live on a main highway in order to get it, for a man is entitled to a good road and to some recompense for what he has paid under the county system. To my mind the development is going to have a good influence upon the minor municipalities for they are doing much better work in the townships generally than they did a few years ago.

The county system has done a great deal of good if the delegates from the minor municipalities go back enthused with the idea that it is necessary for them to put some energy and some thought into the maintenance of the township roads.

How are we going to get good roads? Some one says "Get the money." and thinks it a complete answer. If we have the wherewithal, we surely have the brains to build them. Educate people and you can get the funds. You can go up to Sir James Whitney and his associates and tell them that you want more money.

Educate the people and make the government feel that the people want the money and they will give it to you. After all, the burden of the fight is placed on your shoulders, for the government won't give you anything until you get the people to move them. It is a simple problem, for I know and you know, that throughout the length and breadth of this Province we must spend more money in the building and maintenance of our highways.

I was pleased to hear in the address of the gentleman from Washington this morning his idea of placing the greater burden upon the centres of population. We in York, as you know, have prevailed upon the city of Toronto to help us in the repair of some of our highways, and this is possibly the first city in the country to do this, though I have no doubt there will be more in the future. It is for them to get after the centres and see that they come forward for the development of the highways, for the road is a big convenience to them, even greater than to the farmer himself.

I am pleased, Mr. President, and gentlemen, for the opportunity of saying a few words to you. Let me again try to impress upon you the necessity of doing what you can in your own counties, to impress upon one and all whom you meet the necessity of backing up the Province and the Provincial and the Dominion Governments in granting aid for the maintenance and construction of our highways throughout the length and breadth of the Dominion.

FOREIGN ROAD SYSTEMS.

MR. L. A. HAMILTON.

Mr. Chairman and Gentlemen:

There is a very old saying that, "The way to h— is paved with good intentions." It would almost seem from the numerous expressions of good intentions that have been made throughout the length and breadth of Canada by municipalities, by gentlemen who have assembled themselves together here from time to time in connection with good roads, and by the Provincial and the Dominion authorities, that this fair Canada of ours, that we take such a pride in was to be placed in the position of that unnamed place of which the highway is paved with good intentions.

I am glad to see, however, that we have entered upon a new era. I believe that as a result of the good work that has been going on for all these years, we have at least awakened the people of Canada to the fact that we are the most uncivilized people on the face of the globe if we are to be judged by the condition of our highways. I did not have very much opportunity to see what the rest of the world was doing along these lines until I took to farming. Then I found that, in the leisure that the farmer has and the magnificent profits which he makes, his is the opportunity to go and see the beauties in evidence from one end of the globe to the other. (Laughter.)

The subject that has been allotted to me is entitled "Foreign Road Systems." You will have problems of your own, but we can briefly glance at different parts of the world and see what their conditions are and what they are doing to solve their problems. I have for the last ten years, in my leisure time, made it my duty to go and see what I could of the world, and particularly the railway systems; and including the subsidiary systems, the highways.

The countries that I am first going to speak about have the oldest civilization on the face of the globe, and their farming operations have not and are not being carried on in the same way as these countries which have taken an advanced position with regard to the problems of road construction. The first place that I draw your attention to is the island of Japan, with a population of some 50 millions of people. Throughout the length and breadth of Japan I cannot say now that I saw one single horse or other beast of burden, therefore, you can imagine that they do not require a form of road such as we require. The country has roads it is true, but these roads are for the purpose of men carrying burdens, and if there are ladies or passengers, by what are called jinrickshas.

I do not know why it is that they like to do things just the opposite way to what we do; they draw a saw towards them; they read from right to left, and they read upwards instead of downwards. One of the most peculiar things I saw in connection with the transportation problem, when I was travelling through the country in a wheeled vehicle, was that, though when we get warm we take off our coats, the first thing a Japanese does is to take off his pants.

Passing on to the Empire of China we have there a population of 400 millions of people, and the same conditions practically prevail there as prevail in the island of Japan; most of their freight is transported on a pole hung across the shoulders of two Chinese coolies. I have seen a coolie put a barrel on one end of his pole and weight the other end of the pole with a huge stone. Another method of transportation is by wheel barrows; one person straddles the wheel, or if there are two, then there is one on each side. A great deal of the freight is carried by water channels not only along the coast but also in the interior by rivers and canals constructed throughout the country. Since the settlement of the revolution they have taken men and ideas from our western civilization and some progress has been made in this respect in the last five years, more perhaps in China than during the last ten years in Japan; so that we will expect to find a great change in the transportation systems of China before long.

In their cities, such as Shanghai we have some of the most perfectly constructed roads leading out of the centre of the city. In the city of Canton it would be impossible because their main street is exactly eight feet wide. Nearly all the traffic of that city is carried on by means of sedan chairs, and so narrow are these streets that when you come to a corner it is necessary to open the shop doors in your rear that your bearers may turn your chair around.

Now, we pass to India and there they have a road system which is in a very imperfect condition as yet. They have something that we do not use; they have very broad tires, and so they do not need very perfect roads; they use bullocks. So imperfect are these roads that no man dreams of going up country or transporting a cargo without arranging a place to sleep in his covered waggon for he never knows when he is going to get to the end of his journey.

Then we passed on to Egypt and I may say that the main road in Egypt is the Nile and the canals that are made to communicate with it. That is their method of transportation. They have no roads; or the roads they have are largely thrown up by reason of the construction of canals which are the means they use for the conveyance of goods. Other than this, the transportation is entirely on animals' backs, the donkey for passengers, and the camel for goods. It seems extraordinary to see the farmers with their loads of hay, grain and green clover piled up high on the back of an animal; you see streams of these animals. With the means of transportation that they have in Egypt, they have no need of metal roads such as we have in Europe and on this continent.

Leaving Egypt we go through Palestine; many good roads are being constructed by the Turkish Government through Palestine. I do not think we have such roads in our country anywhere as the roads from Jerusalem to Jericho and from Jerusalem to Nazareth, and away to the south again, they are magnificent examples of road construction.

Italy is waking up under the new constitution. I saw very active work going on in road construction and in the installation of electricity. It was in Italy that they first got the idea of the construction of permanent roads, and the old roads are still in existence. They made a road with about a three foot substructure and paved the top of it with large flat blocks of stone. Italy has adopted a very forward system and they are spending from eight to ten millions per year in the construction of roads constructed at the expense of the nation. They have a system of roads of four classes; they have the national roads which are built entirely at the expense of the nation; the provincial roads which are built at the cost of the of the provinces, and they have the communal and the vicinal roads, or secondary roads. They have a very advanced system and have planned it very well indeed. They have maps showing the various classes of roads, the metal roads and all the various kinds that they have. Any one going through that country can have the best and most reliable information.

Many of the German roads were built many years ago and when Germany was consolidated, the German Federal government took upon itself the entire cost. The German government to-day own practically every mile of railway in the German empire. Last year I passed over a great many miles of the southern portion of the country south of Munich, and found them making roads in every direction, so that Germany is well to the front in the construction of good roads, and has spent a very large amount of money, both national and provincial, in this great work.

In Belgium the administration is centred in the State Department of Public Works. They still use to a great extent the large flag road throughout Belgium, and I think they are away behind in that respect. These roads are not cut out for light vehicles; any person who drives over them will know what paving stones are when he gets through. Seventy-nine per cent. of the roads in Belgium are state roads started by the Federal Government and in this they are a long way in advance of anything in Canada or the United States.

France, I think, to-day holds the premier position in road construction; largely due to their Minister of Public Works. The work of road construction is carried on at the expense of the government. Men are nominated by the President of France for three years; they are at work during the winter months and in the summer months are placed at the disposal of the municipalities, giving their services for the construction of roads. No man can travel through France without seeing that they must have better men and better ideas than they have in many other countries. They have only adopted their system within the last one hundred years, and all these roads have come within the last century. The French people were struggling through the mud until Napoleon conceived the idea of building these roads for military purposes.

They have a number of national roads maintained entirely by the State Government. Then they have their departmental roads equivalent to our county roads of which the cost is divided between the province and the government the same as we have. They have in France a total mileage of 34,000 miles, of which 23,800 miles are built and maintained by the State. They spend a large sum

annually in the upkeep of the roads, the most important part of it. I assure you that you can go over a newly repaired road a few minutes after the contractors are off it, and you would never know that it was not a new road. I spent a good deal of time in that country going over these roads just for the purpose of seeing how these roads are built, and you would think you were wheeling over an asphalt road. We do not make sufficient provision for the upkeep of these roads that we are paying such large sums of money for. That, to my mind, is one of the great things that we find throughout the length and breadth of Europe; that is, the great pains they take to see that these roads, when once constructed, are kept in perfect condition.

Then we pass on to Great Britain. They have entered upon a new era in road building, and the attention of the people of Great Britain has been drawn to this largely through the introduction of the automobile. They have appointed a Road Board, consisting of five commissioners, and this Board have appointed a competent staff of engineers who go through the length and breadth of the Old Country. In addition they have an expert advisory board of the best engineers they can find. The revenue for the construction of these roads is raised by the duty or tax on gasoline; it is threepence a gallon, and in addition to that they have a tax on motor cars, which in England runs from \$15 to \$200. A 60 horse-power car pays \$200 annually, and that money is handed over to the Road Board for the purpose of keeping up the roads: they handled over five millions of dollars in the first year.

It seems to me that we have a great distance to go yet. I believe the automobiles are going to do a great deal of good to the country: I think they are going to be the means of giving us splendid roads. I believe that all of us who are engaged in the fruit business will soon have our motor trucks to take our goods to our customers, instead of hauling them to the train and having them handled two or three times; that before long we will have such good roads that we will be able to load our motor trucks at our own doors and bring them here without any middleman, and lay them down at the doors of the consumer in the city of Toronto. A great deal of the outcry against the farmer, that he is taking the life blood out of the dweller in the city on account of the enormous prices that they have to pay for the necessities of life, will rapidly disappear.

With the altered conditions of motor traffic they are in England putting a crust on roads that carry a good deal of that traffic at a cost of \$2,000 a mile. It is all very well, of course, that we should put a tax on motor vehicles for a part of that expense, but we want to take care that we do not put it so high that it will re-act upon ourselves.

Great Britain is turning over for the purposes of road construction and repair over five millions of dollars every year, with a country only half the size of Ontario. If they are doing that, what should we expect from our Federal Government and the provincial government in the way of helping us with this good work that we have on our hands. Good roads go hand in hand with the advance of agriculture; I do not believe that there is a country that can teach us much in regard to agriculture, but in the matter of roads I think we might learn from Great Britain where Federal aid is freely granted throughout the length and breadth of the country. They have a heavy tax levied on motor spirit and motor cars, and the money thus raised is used for the purpose of road construction and repair.

WELLINGTON COUNTY ROADS.

MR. J. M. YOUNG, HARRISTON.

The first thing in good road construction is to get a good foundation. Where the road is somewhat soft you have to look after the drainage, for often the owners of adjoining lots have used the roadbeds for outlets. I also believe in putting in catch basins where the water crosses the road and have found them very successful.

After this draining, grading is the next thing; I believe in grading a road a little higher than looks to be right, so that any settlement will bring it about where you want it. If it is too low and you have to put on extra stone, it comes to be very expensive.

With regard to re-surfacing, I think field stone gives the best results; it is very hard to roll down and bind, but when once consolidated it stands heavy traffic well. In the county of Wellington good gravel is scarce; so far as my experience goes I have been unable to roll down gravel; the only way that gravel should be used is to have it travelled entirely by wide tires. It always appears in our county to rut on account of the narrow tires. Perhaps if we had wider tires it would relieve that; in a hard stone road we do not have that difficulty.

It is only two years since we got machinery; before that time we were trying to stop the ruts without rolling. We have been rolling for the last two years and it is a grand thing. I do not see how any person can have good roads without a good set of road machinery.

A DELEGATE: How heavy is your roller?

MR. YOUNG: Ten tons; I think the shipping weight was a little over ten tons.

A DELEGATE: Have you had any experience with tar?

MR. YOUNG: We have had no experience; I think that with hard stones tar would keep the stone from picking up; the automobiles, too, tend to pick it up.

A DELEGATE: Is your work done by day work?

MR. YOUNG: Yes, these men are hired by the day.

A DELEGATE: What does your broken stone cost you?

MR. YOUNG: Some places, \$2, some places, \$3, some places, \$4 per cord. After you get the material piled up so that the machine can go in between, we can crush and haul it not more than half a mile at 50 cents a yard; 5 yards to a cord.

A DELEGATE: What about drainage

MR. YOUNG: I go over the roads in the spring when the frost is going out, examine the situation, and decide on the drainage required. If there is a side flow coming down I run drains down along side it and tap feeders into it. We have culverts sometimes that give trouble and I generally have a lot of lumber to keep them from sinking out of place.

A DELEGATE: How do you get your stone; do you pay them so much a cord delivered at certain places on the road?

MR. YOUNG: Yes, after they pile it up I pay them by the cord.

A DELEGATE: What does your road cost a mile?

MR. YOUNG: The greater part of our roads are old stone roads that have been gravelled before; where we can get stone for \$3 a cord, we can get our surface for about \$2,000, 8 feet wide placed on the road, and 9 feet when it is rolled; where we have to build new roads they have been costing us about \$3,500 a mile.

A DELEGATE: How thick is the material.

MR. YOUNG: Old roads, about 8 inches on an average.

A DELEGATE: How wide do you make your roads?

MR. YOUNG: Twenty-four feet; except close to a town, and then we would make it more than that—whatever would suit the traffic.

A DELEGATE: What would you advise for a town road that was clay from the foundation up; would all of the clay have to be removed; what construction would you advise?

MR. YOUNG: I would put in a bottom row of field stone not crushed, and coarse crushed stone; get that down solid and then put the finished grade on that.

A DELEGATE: You have no advice to give as regards tar.

MR. YOUNG: I believe it would be a good finish; I have had no experience with it.

STONE AND GRAVEL ROADS.

MR. CHARLES TALBOT, COUNTY ENGINEER OF MIDDLESEX.

I have never made a speech in my life and I am afraid I am too old now to learn. However, I have been putting down a good deal of gravel and stone roads. From the papers read and the expressions made you might almost conclude that a gravel and stone road was out of the question, and that you can no longer build a road out of gravel. If that is the case you are up against a most wonderful condition of affairs. In western Ontario there are hundreds of miles of good roads that have been built by the counties of Middlesex, Huron and Perth, that have never seen a stone roller and that have seen nothing but good gravel, and they have got good roads. Now, why is it at this present day we cannot use these materials that are available without tacking all this expensive construction on to the people? Why do we not talk on lines that are practical; what do you want an engineer for to stake out a road that was staked out, graded and gravelled 50 years ago. In the county of Middlesex the county roads were staked out, graded and gravelled; they are level, the most of them are 5 per cent. or 8 per cent., and the worst of them are one foot rise in twelve foot run. Does the county of Middlesex want expensive paraphrenalia in respect of engineers and all that sort of thing?

What the people want is the confidence of the government. They want the government to say to them, "We will go hand in hand with you and will build your roads for you; we will assist with engineers and advice where it is necessary, and will give it to you free. I believe that is the way the road question will be solved. It will be solved so that the farmer in the back concession will get a road which he will not get if you start to build roads from the centres of Ontario and branch out to the country towns. These roads are constructed in western Ontario and now you can take an automobile and start at the city of Woodstock and go fifty miles, through to the town of Sarnia; it is the old Governor's road to Sarnia, a gravel road. I met a man motoring through the county of Middlesex from the States, and he said, "You have got us beat in every direction by the roads in your country."

I do not know about the beautiful modern roads that they have been building; they may be superior to the gravel road at certain seasons of the year. But if you take a good gravel road, maintain it right—and that is where we fall down. You

have not in the past made any effort to maintain your roads. You will go to work and build a splendid piece of stone or gravel road, and next year you neglect that road altogether. I think by this new method that you will have a more expensive road to repair than a gravel road; you can level a gravel road about ten miles in a day, and if you are going to build a piece of road that is going to cost you \$8,000 you are up against \$100 a year for interest on your money. Give every farmer a gravel road and if there is no gravel available give him a stone road. You will soon get good roads every place and there will be no trouble pressing the Provincial Government or the Federal Government for assistance.

A DELEGATE: What is your experience with tar?

MR. TALBOT: I have not had any.

A DELEGATE: How do you go to work where there is no material?

MR. TALBOT: Ship it in.

A DELEGATE: How many miles?

MR. TALBOT: If necessary, 225 miles.

A DELEGATE: Have the Government Engineers assisted you up there?

MR. TALBOT: Oh, yes; the Government Engineer is as fine a man as I ever met, and he will give you every assistance that he can give you.

A DELEGATE: Where there is plenty of material how do you go ahead?

MR. TALBOT: After you have got the stone, you must have a stone crusher, and then a road roller to put it into position.

A DELEGATE: How would you do with a light clay road or street?

MR. TALBOT: I would rather not touch the street question. We have been trying to get some information along that line, but are not ready to give any advice about them yet. I cannot give you any information about city streets or town roads because I have never built any. My experience has been with country roads, and I have tried to understand what they ought to be, and what the people in the country want.

STONE AND GRAVEL ROADS.

MR. E. A. JAMES, ENGINEER FOR YORK COUNTY HIGHWAY BOARD.

Mr. Chairman and Gentlemen,—

I find it sometimes difficult to build good roads, but I find it much more difficult to address an audience on this subject, many of whom have spent more time on highway construction than I have.

For a number of years the highway work in Ontario has been carried on successfully under the direction of our Ontario Provincial Engineers. We are directly responsible for the construction of the country roads, but conditions differ. We have country roads a mile or so from the borders of the city of Toronto, on which the traffic was as great, if not greater, than the traffic on some of our city streets.

The first matter that we have to consider is the extent and character of the traffic. I remember hearing a former Provincial Engineer discussing the process of road building, and he described it somewhat like this; the first principle was drainage, the second principle was drainage, and the third principle was drainage. It seems to me that the first principle to be considered in road building is traffic, and we must have some idea of the character and extent of it before we begin to build. I was very much pleased, indeed, to hear a previous speaker put in a strong

plea for gravel roads, because I believe that these will for many years play an important part. One of our difficulties has been to select the road best adapted to the traffic. Some sections will be well served by well constructed gravel roads; others again have to have a pavement almost equal to a city pavement.

My experience in gravel roads has been somewhat limited; we were fortunate in having a gravel in which there was a certain amount of lime, and the gravel would not run. When that gravel was put down in layers of about five inches and rolled, with a fair amount of water, not too much, the road consolidated well. Because the traffic over it was light, it has stood six or seven years and been very satisfactory. The methods of road construction in York County will vary from trap rock to asphalt and gravel, a construction for light vehicular traffic. We took a census of the traffic on one of our roads last year, and found that we had automobiles passing a given point at the rate of one every minute, and a great number of motor trucks weighing five to seven and a half tons. So that a road to take that traffic must have special treatment in its construction. In that case we had four inches of stone followed by another layer of stone as a bond for the asphalt, and this has given good service.

Where the traffic was not so heavy we have the old macadam that was put down years ago as a foundation. On that we have got good results by using two inches of gravel and binding it with limestone. We found that, in that class of construction, at first we used too much water and too much binder. In the attempt to get a stretch completed in a day the road was not rolled enough, too much grit was put on, and was not worked in enough. The purpose of the roller is not to crush the stone, but rather to work it together, and in work of that character the chief difficulty will be to get the wetting and rolling just right for the character of the material you are using. If too much water is used you will not be able to get your top to bind; it will move under the roller instead of binding together.

What is the proper road for a town street is a question that has been asked, and that is a very difficult question to answer intelligently, as all of you know. Conditions vary so with the location of the street. I have in mind a town where the traffic was pretty light on a certain street, and as soon as the street was improved, the traffic from three or four other streets immediately started to pour over that one street. Traffic is sure to be diverted in this way, and that is a case where your estimate of the present traffic is likely to be of very little value. In attempting to answer a general question of that character one must know more than that it is a town street; perhaps an ideal town street would be a good stone foundation with two inches of granite bound with asphalt or tar. Or perhaps that street would be better served by using a sheet asphalt pavement, or bitulithic might answer. You have to take into consideration so many questions, such as, for instance, the amount of money available, and the character of the subsoil, that a general answer is very difficult to give.

HASTINGS COUNTY ROADS.

MR. N. VERMILYEA, BELLEVILLE.

Mr. President,—

I need not say to you that I do not pretend to have a large share of the wisdom that there is in connection with road building. I am a member of the county council, and have been for thirty years, but my work has been in connection with

the finances of the county rather than with the practical work of road building, yet I have been very closely associated with it, and perhaps I may say a few words that would be of general advantage. I was not asked until this morning to say anything to this convention, and it is with a good deal of hesitation that I decided to do so.

I was asked to talk about the condition in Hastings, and not about road building. I think our conditions are unique; our county is 100 miles from north to south, and 30 miles from east to west. Before other counties had anything in the way of roads to any extent we had built about 600 miles of county gravel roads, and upon this stretch of 600 miles we had 240 county bridges. Some of them were so long and so expensive that we scarcely knew how to deal with them; we put up wooden bridges so long as timber was cheap, but latterly timber was so scarce and conditions as to price had so changed that we had to abandon the wooden bridge.

Last year we spent \$104,000 in steel bridges; we put up one bridge across the river at Frankford that cost \$39,000. We are putting in steel only where it is impossible to build concrete, for the simple reason that concrete is imperishable, and the longer it stands the better it is; then there is no painting and no repairs of any kind, and as far as we can we are going to substitute concrete bridges for the wood ones, and when we are compelled by the length of the bridge or other conditions, to use steel upper structures on concrete foundations. But our rule is only to use the steel where we cannot use the concrete. Where you do not need to go high above the water, and where two or three spans can be put up, even if it is 100 feet long, that is where the water is not very abundant and where there is room enough for it to get through, we build two or three spans and thus make bridges 100 feet long of concrete alone.

The question of the comparative value of gravel and broken stone depends upon so many conditions that no man can dogmatize; we have gravel in Hastings that is not worth putting on the roads, and yet it is sold for all purposes. We have other places where we can get good gravel with just enough clay to bind it; we can get no better material, but you must have a well-drained road and a good sub-stratum of small stone or broken stone to bind it and intermix, and the surface of the road of good field gravel and fine stone.

The drainage ought to be emphasized; it is of the first importance. The conditions as to weight and amount of traffic are elements that have to be considered. Yet a good road properly built will sustain heavy traffic, no matter what it is built of; where the foundation is good and the drainage is good, and the surface of the road well rolled, and a sufficient quantity of water used, not too much, the road cannot fail to be a good road, and a good road properly built of either broken stone or gravel is the best.

Whether stone is good or not depends upon the stone. You take limestone that has been a long time exposed to the elements, and powders easily, and it never makes a good road. You take the common hard heads and they are exceedingly good when broken, but they are exceedingly hard on road machinery. The blue hard heads are very destructive on machinery, and we have had to abandon them, but if you can get machinery to break it there is nothing to equal it.

We build our roads in Hastings 20 to 24 feet in width; I do not think that is a bit too narrow, particularly when there is much traffic of automobiles. I think our roads should never be less than 20 feet, and as a general rule they are better if they are 24 feet.

We spent last year \$104,000 in bridges, about \$23,000 on the county gravel roads, and in addition to that we got considerable assistance from the Local Government.

I think we can come here and solicit your pity and your sympathy. We have three rivers in Hastings County; there is the Trent River, with bridges 500 feet long, the Moira and its branches with bridges 300 feet long; a little east of them we have the Salmon River; intervening between these rivers we have any number of minor streams, and we have upon these various streams more than 600 bridges. What do you think of that for conditions to meet? Our engineer gave an estimate of the probable cost of replacing the wooden bridges with steel, and the estimate was \$600,000, and we have already spent \$500,000 in that direction. Not only that, but we have three townships that are not self-sustaining; they never should have been settled; they contribute altogether \$3,000, and we have paid back to them \$13,000.

I do not know of any county in which conditions are found similar to ours. Take the county immediately to the south of us—Prince Edward. There they have seven townships, practically no streams, and I suppose that one bridge that we put up last year would cost more than that county ever spent on bridges. I think that these conditions should be taken into consideration when the question of government aid is discussed. Where exceptional expenditures are required owing to the physical conditions of the country, the counties that have long stretch of roads and a large number of bridges, such as we have in Hastings, and taking also into consideration the conditions that prevail in the long counties of Frontenac and Hastings, I think these should be looked upon as their merits deserve and in accordance with conditions as they really are.

I suggest this as a reasonable way out of the practical difficulties which we have to meet. To raise money by a poll tax is utterly out of the question. The government that would suggest the imposition of one dollar a head would never see daylight. What we want is for the Dominion Government to come to our aid; let them give one-third, let the Ontario Government give one-third, and let the county handle the work. (Aplause.)

That would lift some of the burden off our shoulders and place a little of it on those that are not carrying so heavy a load as we are, and would be treating the whole subject in a fair and just way. As I said before, I do not think it is fair for the rich County of York, that has few streams and an assessment of eight millions, to be treated in the same way as some of the other counties, and that all these other matters should be taken into consideration. It seems to me that an equitable division would be what I have indicated: one-third to the Dominion, one-third to the Province, and one-third to the counties respectively, the roads when completed to be passed by the Engineer of the Provincial Public Works Department. I must say that we have had splendid treatment from that Department, and we are proud of our friend the Engineer, whom I saw here a moment ago. I thank you for asking me to address you and for your kind attention.

PERMANENT BRIDGES.

MR. JAMES A. BELL, COUNTY ENGINEER FOR ELGIN.

I have been asked to read a paper on permanent structures; these go hand in hand with road building, so that when the road is completed there will be no delay, and there will be perfect communication throughout the whole land. After I am through reading the paper, I will be very glad to answer any questions that I can.

Permanent structures as applied to municipal public works are those structures which, when properly built, will remain and fulfil the requirements for which they were intended for the longest possible period. It is not possible to build structures that will stand forever. They are all subject to wear and decay. The whole object is to get a material at reasonable cost, that will, when placed in position, stand the ordinary wear and tear of vehicular or other traffic, and the action of the elements as long as possible without excessive repairs.

The rapid increase in the manufacture of Portland cement and reduction in cost, has made the use of concrete available for a multitude of purposes, and to no use is it more applicable than in building such structures as bridges, abutments, culverts, retaining walls, etc. Taken in combination with steel—the steel being properly imbedded in the concrete—the two materials combine and assist each other in resisting the stresses brought upon them, each material serving the purpose for which it is best adapted.

Brick and stone were formerly used for building abutments, and in some cases, arch bridges and culverts, but only to a limited extent, on account of the difficulty of procuring the material and the cost of placing it at the site of the proposed work. On the other hand, most of the ingredients entering into the composition of reinforced concrete are to be found in every township, and in many districts in every concession. The cement and steel have only to be hauled from the nearest railway station; and as these ingredients in the mixture are by far the least portion, it is not expensive to haul them comparatively long distances.

Plain Concrete.—Plain concrete is admirably adapted to the construction of works where it is only used in compression, such as abutments for bridges. Even for that purpose the use of a comparatively small amount of steel properly imbedded in the concrete will permit of a considerable reduction in the quantity of material used, and in most cases will also show a saving in cost. At the same time it will add materially to the strength and stability of the abutment, by uniting it more firmly together and making it less susceptible to cracks from expansion and contraction.

Concrete Pipe Culverts.—Small culverts up to three or four feet in diameter can economically be built with concrete pipe—preferably reinforced—but these should always be protected at the ends with concrete abutments and wing walls, to prevent the water washing out the earth under them, and permit the free entrance and exit of the water.

The pipe should be made with hub and spigot ends, and be placed close together and cemented, so that there will be no chance of water leaking through the joints and making its way under the pipe. Should this occur, there is danger of the earth being washed out below and thus cause a failure of the culvert.

Short Spans.—Culverts from four feet to eighteen feet can be more economically built with flat tops, when properly reinforced, than by arch construction. The side walls should be made about one foot in thickness up to sixteen feet in height,

and the footings wide enough to suit the density of the ground on which they stand.

The wing walls should have a base of at least one-third the height and be supported by either counterforts or buttresses.

Beam Bridges.—For spans of over eighteen feet and up to forty feet, beam bridges are the cheapest and give greater water-way than arch construction.

The side walls should be made heavier than for flat top culverts in order to safely carry the increased load and beams. Wing walls should be built the same as for flat top structures.

There are cases where beam construction has been used up to seventy-five feet, but generally they are not economical for a span over forty feet.

Arch Bridges.—Concrete arch bridges will compare favorably in cost with steel construction in spans of forty feet to one hundred feet, and in cases where the material for concrete is easily obtainable, this length may be considerably increased. In the construction of arch bridges a perfect foundation is absolutely essential.

In flat top and beam bridges there is no longitudinal thrust. The whole weight of the structure and load is a downward pressure. But in arch construction there is an outward thrust pressure that has to be met with an increased weight of concrete supported by a perfect foundation. Should the foundations of an arch bridge give way, the result would likely be the destruction of the bridge. In the case of a flat top or beam bridge, the settlement of a foundation might not seriously affect the structure; although in every case it is advisable to secure a perfect foundation for any kind of structure.

Steel Superstructures.—For bridges over one hundred feet span it is generally considered more economical to build them of steel on concrete foundations, and in every case they should be made strong enough to support a solid floor. It is quite true that the life time of a steel bridge is not so great as that of concrete, but with proper care and attention, keeping the steel well painted, a bridge of this type should be safe for at least fifty years.

It is said that there is a cast iron bridge in France on the Seine River that was built in 1801 and is still in use.

Kind of Bridges to Build.—The question of determining the kind of structure best suited to any particular crossing of a stream, can only be made after a careful examination of the site and its surroundings. No two sites are alike, and therefore a study of local conditions and requirements is necessary in every case before a recommendation can be made as to the best and most economical structure to build.

Great care should be taken to have the foundation built so that in future years there will be no danger of undermining by the scouring action of the water.

Size of Openings.—Determining the length and height of openings is also an important matter. Freshets will undoubtedly be greater in future as the country becomes better drained. Ample room should, therefore, be provided for the water, for if confined in too narrow a space, scouring of the bed of the stream is sure to occur and consequently injury to the structure.

Design of Structure.—In designing a structure, the first consideration should be the public safety. It is far better to provide in excess of the requirements than to have the structure too weak. Then loss of life would probably be the result. Cheapness in construction should never be considered as against the security of the travelling public.

It is an undoubted fact that a large number of the steel and iron bridges

that have been erected throughout the province are now inadequate for present traffic conditions. This is not all due to imperfect design or construction. Traffic conditions twenty years ago were quite different to what they are to-day. At that time the heaviest load to provide for would probably be a threshing engine or a drove of cattle. Now the law provides that bridges shall be safe for the passage of a traction engine not exceeding in weight eight tons, and where roads are now being systematically improved, it is necessary that they be sufficiently strong to carry a fifteen ton steam roller in addition to the live load provided.

Bridge Floors.—Very few of the bridges that have been erected with wooden floors are strong enough to carry a floor of concrete. In some pin connected bridges where the top chord and batter posts are strong enough, the other members can be strengthened sufficiently for this purpose, but in most cases it means the rebuilding of the superstructure.

All bridges where possible should be constructed with solid floors. Vehicular traffic on wooden floors causes a greater strain and vibration to the bridge than the same loads on a solid floor. This is caused by the irregularities of the plank when worn, and projecting knots. On a solid floor the surface is much smoother, and in consequence of it being a large slab, the stresses are distributed over a larger area.

Traction Engines.—The cutting action of the lugs of traction engines is very destructive to wooden floors, particularly when they are soaked with water; and although the "Act" provides for planking to be laid under the drive wheels of the engine, this is rarely complied with.

Plans and Specifications.—All plans and specifications of steel bridges should be submitted to and approved by a competent tribunal before erection. This is more necessary in the case of steel bridges than of concrete. If a reinforced concrete bridge, after the forms are removed, shows no defects, then after thirty days it is reasonable to suppose that it will stand the ordinary travel, and as its strength increases rapidly, there is little to fear for its safety. But in a steel bridge the reverse is the case. It is strongest the day it is completed, and from that day it decreases in strength.

The Legislature last session passed an Act providing that the specifications of all county bridges should be submitted to the Provincial Engineer of Highways for approval before being built. As the majority of the bridges in the province—and in many cases those most travelled upon—are under control of the minor municipalities, this Act should apply to all bridges.

Inspection of Steel Bridges.—Rigid inspection of steel bridges after erection, by a competent person, should be compulsory. The design and specifications of a bridge may be all that is desired, but if the erection is defective, then the whole intention of the design is a failure. This inspection should be made immediately after erection and before any painting is done. All rivets, particularly those in tension members, should be carefully examined and each one tested with a light hammer to see if they are loose or do not fill the holes properly. All loose or imperfect rivets should be cut out and properly replaced.

The Provincial Engineer of Highways in his last report has an amended specification for steel highway bridges, which, if lived up to, will ensure the completion of better bridges in future. Proper inspection after erection is the only way to guarantee that those specifications are effective.

Inspection of Concrete.—For concrete structures it is very important and necessary that a competent inspector should have charge of the work. He should be able to thoroughly understand the plans and specifications prepared for the

work, and also have a knowledge of the different ingredients that make up the concrete, how to mix and place them in position. He should also know how the forms for holding the concrete should be made and placed, and see that they are strong enough to resist the pressure of the wet concrete. Good results can only be obtained by a thorough knowledge of materials and how to prepare and place them in position.

Painting.—Keeping steel bridges well painted is a matter that should not be forgotten. Unpainted or imperfectly painted bridges deteriorate very rapidly in strength, and although a fair margin of safety is provided in the design, a failure to properly protect the steel will soon reduce the strength of the bridge to a point where it will be unsafe.

A DELEGATE: What is good concrete?

MR. BELL: First class material is first needed; the brands of cement now sold are generally good; years ago you would probably get bad cement, but that is very rare now; enough sand should be used to fill all the voids in the stone, and enough cement to fill all the voids in the sand; this, properly put together, will make a first class concrete.

A DELEGATE: Can you give the percentages?

MR. BELL: Sometimes you cannot; the fineness of the sand affects it; the voids in the stone must be properly filled.

A DELEGATE: Would you have to have an expert to tell this?

MR. BELL: Not at all. Suppose you take a water-tight box and fill it with water and measure the water; then empty it and fill it with broken stone, and fill it with water again; the water that it will now hold will be the voids in the stone that are to be filled with sand. You can practically do that with sand; it is only a simple problem, you do not need an engineer to do it. It is quite usual in making a specification to tell you that one in six will make a good mixture, but this may not always be right; sometimes there will be five parts sand in the gravel and sometimes only two, and you will have two very different mixtures on the same specification.

A DELEGATE: What about lake gravel?

MR. BELL: That would depend altogether upon the gravel. Some authorities say that sharp, pointed stones make better concrete; you might have good lake gravel that would be five parts of sand to one of gravel.

A DELEGATE: Suppose I have one part of gravel and one part of sand?

MR. BELL: Then you would not have enough sand, and you would have a porous concrete. If you had more sand than stone you would have a weaker concrete.

A DELEGATE: Would you recommend tamping it

MR. BELL: No; the modern way is to make it sufficiently wet so that you do not need to tamp it. If you are using re-inforcements you cannot tamp it; it must be soft so as to run all round them.

A DELEGATE: Do you think it is necessary to turn the ends of your re-inforcement?

MR. BELL: It is claimed that a bend the length of 24 diameters will rupture the rod before it will pull out. It does not do any harm; it is quite frequently done. I do not think it is necessary to turn up more than an inch or two.

A DELEGATE: One engineer turned them down.

MR. BELL: I do not think it makes any difference; turn them up or down.

A DELEGATE: How closely would you put steel re-inforcement?

MR. BELL: That would depend upon the size of the steel; about 9 inches is a good rule if you are using about one per cent. of steel.

A DELEGATE: In starting the foundation for a bridge, can we run it under water?

MR. BELL: Generally speaking, get the water out of the way if you can. If you throw the concrete in, the water will wash all the cement to one side; it should be put into bags and let down gently and that will keep it from being washed away; if you wash your cement away of course you destroy it. Or you can put cement in ten feet of water by running it down in a box or tin pipe. Don't disturb it afterwards.

A DELEGATE: In driving a traction engine across a bridge, should plank be put down?

MR. BELL: They would require to carry plank on the traction engine; they should do so, but they don't.

A DELEGATE: Would the difficulty be overcome if the municipality supplied the plank?

MR. BELL: I do not see why you should do that. If you have to supply plank for every bridge that would be quite a lot, and the plank would not stay there. I leave plank sometimes now, and in a day or two I can't find it anywhere. That will soon work itself out; the day of the wooden floor is pretty nearly gone.

A DELEGATE: How often should an iron bridge be painted?

MR. BELL: That depends a good deal on the paint with which you paint the bridge; a bridge should be painted about every five years. Don't paint with oxide of iron; it is a good paint; but it lasts only a short time: I would prefer some preparation of graphite.

A DELEGATE: Do you think it is economical to build concrete structures over 100 feet?

MR. BELL: That depends altogether upon the conditions; I think the longest arch span to-day is 328 feet; if you have lots of material at the site and can get a good foundation at a reasonable expense, there is no objection to a long bridge. The longest bridge I built myself is 116 feet. I would not advise going much over 100 feet, but you can have 100 feet if you want to.

I have had considerable experience in building streets in villages both for heavy traffic and for light traffic. For light traffic in a village street you can build a very good street with gravel; but then it depends a good deal on your gravel. There is all the difference in the world with gravel; you can get a good clean gravel that won't stick together; in other pits you will get gravel with a good deal of lime in it that will stick just exactly the way you put it. If you can get gravel like that you can make a street that is as good as broken stone. The first thing is to get your street well rounded up. Then see that your drainage is right. Don't put broken stone or gravel on any foundation that is not properly drained. Run a drain down each side if necessary; if it is on sand it will be self-draining. Fill in with cinders or gravel so that the water can get away; then put on a finer layer up to the dressing course. Use water immediately ahead of the roller; it will be only a short time that you will have to roll like that and you will find that you will have a road that will hold water on top and will be perfectly hard and smooth. You must get good material; the better the material the longer the street will last.

A DELEGATE: Are there special men that we can get, that have had experience?

MR. BELL: A man that has never done it would not know; he would probably make a good many mistakes. There are men in most of the cities who have been building macadam roads for years that are perfectly equipped.

A DELEGATE: For ordinary traffic what depth is desirable?

MR. BELL: About six inches of stone after consolidation.

A DELEGATE: Would you put a tile drain in the centre of the road or at the side?

MR. BELL: Not the centre. Supposing water gets into the gutter, how is it going to get back into the centre? If you have soft spots in the middle of the road, then put drainage tiles into them and lead them out to the side.

A DELEGATE: Suppose the gravel is of the nature that you were speaking of and will answer the purpose of stone, what will the street cost?

MR. BELL: Suppose your gravel would cost you a dollar a yard or say 60 cents; then you have to figure out how much you have to take to the road; a yard of gravel will cover about 9 feet; then you have got to start with your excavating at so much a yard, the gravel at 60 cents and so on.

MR. W. C. QUICKFALL: I live up in the county of Wellington, and there we have a good deal of trouble with the roads in the winter time; the talk has all been about the summer eight months, but what about the other four; the farmers do most of their teaming in the winter time and very often they cannot get out.

THE PRESIDENT: We have been very glad to have the information given us by Mr. Bell, and it can be used at any time by the municipalities; I am sure that he has given us a lot of very valuable information from an engineer's standpoint, and something that we will be able to use.

PEEL COUNTY ROADS.

C. R. WHEELOCK, COUNTY ENGINEER.

The system of roads assumed by the County of Peel, and approved by the Lieutenant-Governor-in-Council, as provided by the Highway Improvement Act, is said to be one of the best laid out systems in the province. The county is an irregular shape, the townships adjoining the easterly and northerly boundaries being gores. It increases from a width of eight miles at the southerly boundary (the northerly shore of Lake Ontario) to a width of 19 miles at the north, and the greatest length from south to north is 35 miles. The road system consists of one main north and south road, known as Hurontario Street, running through the county from Port Credit on the lake shore at the south to Orangeville at the extreme north, and the following main roads running east and west, all of which cross Hurontario Street: The Lake Shore Road, running along the lake shore through the county; Dundas Street, from the Etobicoke River (the easterly boundary of the county) to Erindale; the Brampton Side Road, from the ninth line of Toronto (Gore Township (near the easterly boundary of the county) to the westerly boundary of the county; the Bolton and Terra Cotta Road, from Bolton to the westerly boundary of the county. Besides the above main roads, there are a number of shorted pieces, all connected with the main roads except ten miles in the north part of the township of Albion, leading to the village of Palgrave. This makes a well connected system of road leading to the markets of the county, and also forming connections with main roads in adjoining counties for through traffic.

The by-law designating a system of roads to be assumed by the county was passed by the council in 1906, and work was commenced on the roads in the following year. The principal work done the first year was the building of a number of bridges and culverts necessary to allow the heavy road-building machinery to pass over the roads; only one mile of road was completed. This piece of road was well constructed. In the first place, it was properly graded and drained and then metalled with crushed stone consolidated with a steam roller. Although there was considerable opposition from the people while the work was being done, after it was completed everyone seemed to be well satisfied, and the work on the county roads has gone on steadily since that time with very little opposition. At the end of last season 65 miles had been graded, metalled and completed, and besides about ten miles were graded ready for metal. Permanent bridges and culverts, of cement concrete and steel, have been built where required on almost the whole system, leaving very few old ones to be replaced. We have built a total of 41 bridges of 10-foot span and over, and 58 reinforced concrete culverts up to 10 feet span, and besides have put in 357 concrete and steel pipe culverts. The total amount expended up to the 15th of November last and certified as coming under the provisions of the Highway Improvement Act is \$240,618.77, and the total amount paid to the county by the government, as provided by the Act, is \$81,995.94 (including the one-third due for last season's work).

The roads are graded from 22 ft. to 28 ft. wide and metalled from 8 ft. to 15 ft. wide. The depth of the metal consolidated is from 6 inches to 7 inches. The metal used was crushed stone, crushed and screened gravel, and natural pit gravel. The most of the crushed stone used was brought in by rail, as local material was not available, and in such cases the freight rate increased the cost very materially. In some cases the freight on stone which cost 50 cents per ton f.o.b. at the quarries was \$1 per ton. If this association would take this matter up and could succeed in having the freight rates on stone reduced, it would certainly help along the good work of road improvement in sections where local material cannot be procured.

The total cost per mile for the different classes of roads was as follows:—

Roads metalled with crushed stone, shipped in from.....	\$2,500 to \$4,000
Roads metalled with crushed stone, local, from	2,000 to 2,500
Roads metalled with gravel crushed and screened from	1,800 to 2,300
Road metalled with screened gravel	1,500 to 1,700
Roads metalled with pit gravel, from	900 to 1,300

The road machinery owned by the county is as follows: 3 ten-ton steam rollers which cost \$8,300; 3 road sprinklers, cost \$734; 2 rock-crushing plants, consisting of a crusher, elevator, rotary screen and 20-ton mounted bins, cost \$1,400 for each plant; 1 gravel-screening plant, consisting of a 4 horse-power gasoline engine, elevator, rotary screen and 12-ton mounted bins, cost \$1,125, together with graders, wheel scrapers, drag scrapers, plows and tools: amounting in all for the entire plant to about \$14,500.

The cost of operating a plant crushing stone amounted to \$15 per day, including the amount paid per day for a 14 horse-power traction engine which supplied the power. The amount of stone crushed averaged about 40 cubic yards per day, making the cost of crushing about 37½ cents per cubic yard.

The crushing plants were also used in gravel pits where there was an excess of coarse gravel and stone. The material was run through the crusher, screened and separated in the bins. The cost of operating, including the cost of handling stone

and gravel in the pit, was about \$25 per day. An average of about 60 cubic yards of metal per day was turned out, making the cost about 42 cents per cubic yard.

The gravel-screening plant was used in a pit where there was an excessive amount of sand intermixed with the gravel. This was screened out and the fine and coarse gravel which was left was separated in the bins ready for the roads. The cost of operating was about \$10 per day, and the amount of screened gravel obtained about 28 cubic yards per day, making the cost of screening about 36 cents per cubic yard.

The Highway Improvement Act has done much to demonstrate to the people of Ontario the advantage of good roads, and has given an impetus to road building on scientific principles in many parts of the province. It has, however, been generally admitted that for obvious reasons the aid given to counties under the Act is not sufficient for main roads which have to be kept up for through traffic. And it now seems that in the orderly course of progression the time is ripe for a further step in the shape of a provincial system of highways, to be built and maintained by the province, with the aid of the subsidy to be given by the Federal Government for the improvement of highways. These roads would be object lessons in the scientific construction and maintenance of highways, and would do much for the cause of good roads in an educational way. Besides, the best results should be achieved at a minimum cost, and the roads could be constructed and maintained on the most approved principles, under experienced supervision.

In selecting the roads for a provincial system of highways the object in view should be the greatest benefit to the greatest number, and in carrying out this very wise maxim the farmers, who are the backbone of this agricultural province of ours, should get the first consideration. In fact, it seems to me that if we do what is in the best interests of the farmer in this matter, we will not require to go much further, as the interests of the farmer are so interwoven with the interests of the business man and the prosperity of the urban municipality depends so much on the prosperity of the rural municipality, that their interests cannot be separated.

Now, I do not think any general scheme can be laid down for this system of roads in old Ontario that is more practicable and will answer all purposes better than a connected inter-urban system having at least one main road through each county. This would provide a system of trunk roads for tourist traffic, as well as the roads for inter-urban traffic. This system of roads built and maintained by the province, with well constructed lateral roads, or feeders built by the counties, would give us a system second to none on the continent. It would require, say, 2,200 miles of road, to cover this system, and would cost, say, \$15,000,000. This amount would necessarily be spread over a number of years, as it would be required only as the roads were built, and would be a small amount compared with the enormous sums expended on roads by other progressive countries.

THE PRESIDENT: I am sure we are very much pleased to have Mr. Wheelock address us; he has given us a really finished article, and has given us some very valuable information.

THIRD DAY.

Friday, February 28th, 1912

Morning Session, 10 o'clock.

At the Reception Room, Parliament Buildings, Toronto.

THE PRESIDENT in the Chair.

The Report of the Committee on Resolutions was taken up.

Clauses 1 and 2 were read and adopted.

Clause 3 was read, respecting wide tires, prohibiting the manufacture of narrow tires after two years and the use of narrow tires after seven years.

MR. L. A. HAMILTON: I think we should take charge of the wagons that are imported; the Federal Government should arrange to prohibit the importation of these wagons that do not conform to our laws.

MR. BUSH: I think that the recommendation to the county councils should be recorded in the meantime so as to show that this is in their interest when the bill is submitted in the House. It is a matter for educational work in the county, and I would suggest that in some way we incorporate the idea in the original resolution that the matter be brought before the county councils from this association.

MR. HAMILTON: I want to request the Dominion Government to take such action as will prevent the importation during the same period, of the wagons mentioned here.

A DELEGATE: That would be a very strange thing to do, to ask the Dominion Government to prohibit the importation of wagons from the United States if they have narrow tires.

MR. HAMILTON: I say it would be absolutely unfair to put an embargo on our local manufacturers and leave it off the foreign manufacturer: that is to say, to prohibit the manufacture and at the same time not prohibit the importation of small tired wagons.

A DELEGATE: If they were not used they certainly would not import them.

MR. HAMILTON: I move in amendment that the Dominion Government be requested to take such steps as will prevent the importation of the wagons with narrow tires into Ontario after the expiration of two years.

THE PRESIDENT put the amendment which was carried.

THE PRESIDENT put the third clause as amended, and declared it carried.

THE PRESIDENT read clause 4, that provision be made for taxing automobiles at the following rate per year:

Up to 20 horse-power, 25 cents per horse-power.

From 20 to 30 h.p., 50 cents per h.p.

From 30 to 40 h.p., 75 cents per h.p.

Over 40 h.p., \$1.00 per h.p.

MR. HAMILTON: Is that for motor carriages or vehicles? I think we ought to make a difference for trucks and vehicles used for the transportation of farm produce.

THE PRESIDENT: This means anything on four wheels run by a gasoline engine.

MR. HAMILTON: Trucks are slow moving and entitled to be treated differently.

THE PRESIDENT: This applies to all gasoline wagons and carriages.

A DELEGATE: The question of transporting goods is an important one and ought to be encouraged.

MR. HAMILTON: There are gasoline traction engines that are used for thrashing machines; it should be made perfectly clear that the law should not apply to cars of that description.

THE PRESIDENT: This reads motor cars; would you say that gasoline engines, traction engines, were motor cars?

MR. HAMILTON: It might be; it might be said to be used for gasoline trucks or traction engines.

A DELEGATE: If I were delivering my goods by a delivery wagon drawn by a horse, and some other man gets rid of his horse wagon and gets a little car, he ought not to be taxed any more than I am, for the delivery of his goods.

MR. HAMILTON: I think if you change that word "car" to "carriage," that is the distinction used in England, and I will move an amendment to that effect.

THE PRESIDENT declared the amendment carried.

A DELEGATE: As far as traction engines are concerned and all that sort of thing, this is simply a recommendation, and the Government may not accept this at all. At the same time, the original motion simply means that we are anxious to tax motor carriages.

THE PRESIDENT: And that the fees thus collected be used for the improvement of the roads. I declare this clause as amended carried.

The report of the Committee on Resolutions was then adopted in full as follows:

To the Good Roads Association.

The Committee on Resolutions reports as follows:

1. That we approve of the idea of Federal aid for highway improvement.
2. That the Federal Government be requested to set aside the sum of \$50,000.-000 to assist in the improvement of the public highways of Canada.
3. That we are in favour of making the use of wide tires compulsory, and that the Provincial Legislature should prohibit the manufacture of wagons with narrow tires after two years, and prohibit the use of wagons on the public highways without wide tires after seven years, and that the Dominion Government be requested to take such steps as will prevent the importation of wagons with narrow tires into Ontario after the expiration of two years.
4. That we approve of the proposed loan of \$5,000,000 for the development of Northern Ontario and express the hope that a large proportion of the amount will be used for road improvement.
5. That the constitution be amended by increasing the annual fee payable by counties from \$10 to \$25 per annum. (Amended. See page 61.)
6. That provision be made for taxing motor carriages at the following rates per annum:

Up to 20 horse-power, 25 cents per horse-power.

From 20 to 30 h.p., 50 cents per h.p.

From 30 to 40 h.p., 75 cents per h.p.

Over 40 h.p., \$1.00 per h.p.

And that the funds thus collected be used for the maintenance of roads constructed under the Highway Improvement Act.

7. That this Association places itself on record as heartily approving of the method in which the Provincial Legislature has aided in the construction of public highways, and would recommend that when the Federal Government grants additional aid that such sums as may be apportioned to Ontario be expended through the Department of Public Works in such manner as they may deem to be in the best interests of the Province.

The Report of the Committee on Revision of the Constitution as adopted is as follows:

To the Ontario Good Roads Association.

GENTLEMEN,—Your Committee on Revision of the Constitution beg leave to report as follows:

1. That the annual fees of counties and cities under 100,000 population should be changed from \$10 to \$25. (Amended. See page 61.)
 2. That for cities of over 100,000 population the fee should be \$50.
 3. That anyone can become a life member of the Association on payment of \$25.
 4. That the Executive has power to add an advisory committee to their number if necessary.
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DEPUTATION TO THE PROVINCIAL GOVERNMENT.

MR. RANKIN: This meeting has been called for the purpose of laying before the members of the Government our views as to the roads of Ontario.

We have here the Minister of Public Works and the Minister of Mines, and three speakers from the Ontario Good Roads Association, who will give addresses.

HON. J. O. REAUME: Gentlemen, we are pleased to see so many of you present, and we are glad to listen to your arguments and consider them. I have arranged to get as many of my colleagues as could possibly be spared, and we have with us the Hon. Mr. Hearst. I would also ask you not to disperse after you are through for I would like you to have an opportunity of meeting Sir James Whitney, who at the moment is very busily engaged but who will be with us later.

MR. HAMILTON.

MR. L. A. HAMILTON: I have much pleasure in coming before you this morning. We are assembled here together in a somewhat unusual manner; I think it has been our custom before, when we came before the representatives of the Government to say "Your money or your life!" but I am glad to say that on this occasion we are not here primarily for the purpose of asking for money from the Government of the Province of Ontario. You are aware of the needs of the people of the Province, and I do not think we need urge upon you the importance of road construction; I believe that is established now throughout not only Ontario but the whole of Canada to such an extent that we do not need to carry out an educational programme. This Ontario Good Roads Association was established in the year 1894, and I believe it is largely due to the educational work that has been carried on by the members of this Association that Canada stands to-day ready to take an advanced position with regard to the construction of public highways more than it has ever done in the past.

In the year 1896, largely I believe at the request of this Association, the first highway commissioner was appointed in the person of Mr. Campbell. It was a loss

to the Province of Ontario when he had to leave us and go to Ottawa, but his mantle has fallen upon quite as able shoulders in the person of Mr. McLean, the engineer who is now employed under you. (Applause.) Mr. McLean has done yeoman service for the advancement of our cause and we are grateful to him and to the Minister who is ready at all times and in every possible manner to further the work.

Then we had the Highway Improvement Act of 1901, under which the first practical steps were taken, and I am glad to see that the Government has brought forward a bill even in advance of a request from this Association, setting aside a further grant of \$1,000,000 for this purpose. We desire to thank you and your colleagues for this assurance with regard to this very important work.

We have this year a still further advance. There has been an intimation from the Federal Government that a large grant will probably be made. It was so expressed this morning, and we had a resolution drawn up stating that "if" the Federal Government. We took out that little word "if," which is a very dangerous word, and the word "when" was substituted, for we felt that the Federal Government are bound to make a large grant to the rural population to assist them to have the highways that we should have. We are proud of the advancement that has been made, and now we want the last blot that rests upon the fair name of Canada removed. We want to be able to point in the next few years to a standard system of public highways that will be the equal of any of the countries in the world.

I would like to read the following resolution which was unanimously adopted this morning (Clause 7 of the report of the Committee on Resolutions): "That this Association places itself on record as heartily approving of the method in which the Provincial Legislature has aided in the construction of public highways, and would recommend that when the Federal Government grants additional aid that such sums as may be apportioned to Ontario be expended through the Department of Public Works in such manner as they may deem to be in the best interests of the Province."

You see, sir, that this delegation, representing this Association embodies the most absolute and entire confidence in the Department of Public Works, and that we wish that this money to come from the Federal Government, should be entrusted to you and to your engineers to see that it is properly spent in an advanced system of improved highways throughout the country.

I wish to say, in conclusion, that if he who causes two blades of grass to grow where one grew before is worthy of honour from this country, how much more is he who causes a mile of road to be so improved that where formerly you could haul one ton over it you can now haul four tons over it at the same cost, worthy of greater honour. When you look at the construction of railways and realize that they can haul 100 pounds weight from the city of Winnipeg to the head of Lake Superior for 10 cents, I say all honour to the men that devised it. But when you consider that we can haul 100 pounds only ten miles for that sum; and when we consider, too, that nothing has been done or will be done that is more conducive to the promotion of good feeling among a large portion of our people, for half the population of Ontario live in the towns and villages, then we will admit that there is nothing of such splendid national value as the construction of these good highways which we have in contemplation.

In the towns and cities they have automobiles; in the country they keep cows; in the towns and cities they are very much afraid of cows; in the country they are equally afraid of automobiles. We want that to be done away with it. We

believe that no greater duty rests upon you who are charged with the administration of our affairs than to see that this blot that rests upon the fair name of the Province of Ontario should be swept out of existence, and in this, I believe, we have the hearty support of yourselves and your colleagues in the Government of the Province of Ontario. (Applause.)

MR. YOUNG.

Mr. E. M. YOUNG (Picton) : I have been chosen by the Good Roads Association to present to you some of their views upon the maintenance of good roads, namely, with regard to the wide tire law that we wish to see passed by your Government.

We know that you started some years ago in road construction by giving money for that purpose, and that you are impressed with the fact that what we most need is good roads. A delegation was down at Ottawa the other day. It was an influential delegation, and I am sure when you look at these gentlemen present that you will agree with me that Parliament does not often have before it so influential a deputation as is appearing before you to-day.

We represent the farming portion of this community. One complaint has been that we could not keep the boys on the farm. I think that, with good roads, automobiles, and the hydro-electric, we will have no difficulty in keeping the boys on the farm, because they will be in touch with the city.

You have given us much money for the construction of roads, and I believe are willing to give us considerably more, and will do more than has been done in the past. I submit that a portion of this should be given to the maintenance of the roads. That is, we want to relieve the people of this burden; in my county we have sixty miles of road that has been built with the money that you have given, and with our own money, and it is a burden upon us to look after these roads. An important thing to do is to establish this wide tire law. I find that you are in touch with the needs of the country; the Hon. the Member from Frontenac has already prepared a bill which he intends to introduce at this session, which nearly covers everything that we could wish in the shape of a wide tire law.

We established a wide tire by-law in Prince Edward, but the people coming from other counties came without wide tires. We found also that it was a heavy burden upon the farmers of Prince Edward county; they had to change their tires and had to change their felloes as well, and it amounted to a direct tax of about \$20.00 on each one of them. If this measure becomes law, we take the tax off the farmer and put it where it belongs. The resolution which we have passed in favor of wide tires will put the burden on the manufacturer and take it off the farmer, and that is what we want if we are going to keep them on the farm.

MR. SQUIRES.

Mr. S. L. Squires (Waterford) : We have been delegated this morning to present to you our first resolution, which states that a large grant of money has been made by your Government towards the development of New Ontario, and there is, of course, no possible objection to that. But there is one view that we thought ought to be considered: that a large part of it should be spent in the construction of highways in this important part of our Province, and we desire to impress that the money should be spent in a large manner in that way.

The proposed tax upon automobiles has been considered, and we are convinced that they should be taxed upon a graduated scale, for the reason stated, that

the smaller machines cannot damage the roads to the same extent as the high-powered machines do.

It is the desire of the Association that any funds which might be collected by this tax should be used for the maintenance of the roads. The previous speaker has called your attention to the importance of this matter of maintenance of a road after it is built. We feel, sir, that there is such a continual call from those parts of the counties which are not yet enjoying good roads, for there is no county that is entirely covered. We have found that in some cases there is a tendency to neglect the roads which they already have, and a growing conviction that it does not pay to expend a great deal of money upon good roads and leave them to take care of themselves. We believe as an Association that your Government should take this upon yourselves, and consider not only the question of building roads but also the question of maintaining them.

Now, sir, we are bound to express our gratification at the sympathy expressed by yourself personally, and the attitude of your Government.

In convention yesterday it was brought out clearly by the representatives of the different counties that they are all desirous of obtaining sufficient funds from this Government that they may build highways that will be a credit to this Province, and we cannot see that the responsibility of this Government will be any the less by reason of the grant of the Federal Government; we feel that the interests of the Province should be treated as the larger interests and that we should expect a greater aid because of this.

It appears to us that it is very seldom that a Government has had anything so important before it as this matter of Good Roads; and your actions will, I am sure, accentuate the support which we have given to you in the past.

HON. J. O. REAUME.

HON. J. O. REAUME: Gentlemen, I can only repeat that I am more than pleased to see you in such large numbers. I had the pleasure yesterday of visiting the Association down town, and am pleased to see that you are so prompt in returning my visit. I think our Provincial Secretary has time and again said that, in order to pass local option, he wanted first to see that it was backed up by public opinion. I have only to look over this audience to see that there is no doubt of there being a three-fifths majority in favour of good roads.

This Government is glad to recognize the good work which has been done by the Good Roads Association, and I am glad that you appreciate what we have done. Upon request we are always glad to give you all the assistance we can in carrying on your work. That is one reason why we undertook to foot the bill for the printing of your reports so that the knowledge may be disseminated through the Province.

I thank you for the words which came from Mr. Hamilton; we have done our best in the past, and with more experience and with more knowledge in the construction of good roads we ought to do still better in the future.

The question that has been raised regarding maintenance is certainly one that appeals to us very strongly; it is a very good thing to build good roads, but it is important that these roads should be maintained.

I cannot say that I am in a position to say much to you with reference to the application of the Federal aid; it is new as yet; we do not know exactly what apportionment will be made by the Federal Government; but we will take steps to meet the situation when it comes. The Federal aid will certainly be welcome, and

we will endeavour to put it to the best possible use. I do not know whether that proportion will be ear-marked, or what standard of construction they will require, or what locations will be selected, but the question will be dealt with as soon as it reaches us, in the best possible manner. That is the position of the Cabinet.

HON. W. R. HEARST.

HON. W. R. HEARST: I am sure it has been a pleasure to listen to the addresses which we have had upon this subject; it is very interesting and important. No one else, perhaps, understands the question as you do, and how important the part which good roads play in the development of this country.

(At this point Sir James Whitney entered the room and was given a most cordial reception.)

I am sure, gentlemen, that you will have the co-operation and assistance of this Government so far as it is possible for it to do so along the lines that you have suggested. Some of you have referred to the roads in the northern part of the Province and have suggested that a considerable part of the \$5,000,000 should be devoted to roads. There is no doubt but that it will be necessary to devote a portion of the sum to that purpose. It is one of the greatest burdens that the Government have to undertake, and it means a gigantic thing, when you consider that that land is about four times the area of the southern part of the Province. I just mention that to show the problems that we have on hand in the development of that country.

THE PREMIER OF ONTARIO.

SIR JAMES WHITNEY: Gentlemen of the Good Roads Association (I believe that is the proper name of your body), I think it a good sign when men get together with an object in view such as you have. It is proper and right that you should mend your ways, and, further than that, I am in sympathy with the object which your Association has in view. I am glad to see the interest that is manifested from all parts of the Province in this subject, because, while I agree with the proposal that it is not wise to look backward, but always to keep one's face steadily to the future, I cannot avoid mentioning the fact that in the past our people have not devoted as much attention to the very interesting and important question of good roads for Ontario.

I worked on the roads myself when I was a boy and I would not like to tell you what my opinion was then of the kind of work that was done under that miserable farce called Statute Labour. I know that some of us who were ten or fifteen years of age looked forward to the season when the roadwork was done as a kind of a holiday and we made it such. All these things have gone by, and you have the Ontario Government and a new system at work. The attention of the Government has been given to this subject and will be given to it in the future.

I was very glad, indeed, and I am not speaking in any party sense, to see that the Prime Minister of the Dominion was prepared to assume the responsibility for what he proposed before he got into power, that he made up his mind to keep his promise at the earliest possible moment, and has done so. The details of the scheme, the method and the manner of it, are of great importance, and cannot be dismissed in an afternoon. All the details of it remain to be worked out yet, and therefore we who represent the people of Ontario for the present will be very glad indeed to receive any suggestions, and I can assure you that these suggestions must tend to make our task much easier than it otherwise would be. It is a matter that

requires a great deal of thought and consideration by practical men as to how the financial aid to be given by the Dominion should be spent, either in conjunction with the financial aid to be given by the Province or otherwise.

There are a great many different points that will be and have already been put forward, and of course we will have to decide between them. On that account I am very glad indeed to receive suggestions from so eminently practical a body as the Good Roads Association. I hope that this is not the last time that you will come here, and I hope that we will see you again. Whether you want to see us with regard to good roads or not, we will be happy to see you in connection with matters of importance to the Province. (Applause.)

HON. J. S. DUFF.

HON. J. S. DUFF: I do not know that I can add to what has been so well said by the Prime Minister, Dr. Reaume, and Mr. Hearst. I think you can well understand that, coming as I do, from one of the counties that was one of the first to take up the matter of good roads, naturally what I have seen there interests me in the matter of helping to evolve some scheme that will better conditions throughout our Province, and in other counties where such steps have been taken.

For many years it was my privilege to be connected with municipal matters, and one of the greatest handicaps we had to contend with was the lack of permanent roads, particularly in heavy soils. I have found that under the good roads proposition highways have been constructed which have the characteristics of stability and permanence, and that great benefits have resulted therefrom.

I do not wish to say more except to wish you every success.

PRESIDENT KENNEDY: I would like to extend to the Premier and his colleagues the thanks of this Association for the pleasure we have had in having them with us and for the hearing they have given us.

SIR JAMES WHITNEY: I am sure we do not need any such incentive as that; we do not expect any particular acknowledgement; we do our duty; that is what we are for. We like to meet gentlemen like you when they come, and we endeavour to pick up all the suggestions they throw out. The pleasure is all ours.

AFTERNOON SESSION, 2 O'CLOCK.

PRESIDENT KENNEDY in the Chair.

The following officers were elected:

Hon. President, A. M. Rankin, M.P.P.

President, T. L. Kennedy.

Vice-President, Mr. Vermilyea.

Hon. Secretary-Treasurer, Col. J. E. Farewell.

Secretary-Treasurer, Geo. S. Henry.

The following gentlemen were nominated for positions on the Executive Committee, and the nominations were referred to a nominating committee to consider and report: Messrs. J. A. Sanderson, John M. Young, C. R. Wheelock, Dr. C. O. Fairbanks, S. L. Squires, W. R. Cummings, K. W. McKay, John H. Moffat, John Hamilton, J. P. Griffin, Major Sheppard, J. M. Stoness, Wm. Lane, W. H. Pugsley.

ADDRESS.

JAMES ARMITAGE, DUNROBIN.

I have had a little experience in municipal matters; have had the honour of being Reeve of my township, and had the pleasure of attending the first road convention held in the city of Ottawa, about twelve years ago. I do not think there is any question that appeals to the welfare of the people as the question of good roads; we have about twenty counties in the Province of Ontario that have adopted the good roads system, and have taken advantage of the Provincial assistance in making their roads.

I feel that it would not be out of place to give a short account of what has been done in Carleton County. We have had the good roads system in the county of Carleton for the last two years; we found it difficult in the county of Carleton to adopt a system that would be acceptable for the reason that we have a very large mileage of toll roads, more than any other county in the Province of Ontario. When this Association was formed there were some 65 miles of toll roads in the county. As you are aware such roads generally surround the cities, and these toll roads all led to Ottawa, consequently they existed mostly in the townships surrounding the city of Ottawa. The great difficulty in the good road system lay in the fact that the ratepayers of the rural municipalities felt that they were going to incur a very heavy expense in carrying out the good road system, by buying out the toll roads which surrounded the city of Ottawa, and they thought that they would be paying for good roads round the city of Ottawa largely for their benefit and which would be of very little benefit to the taxpayers of the county thirty or forty miles back. We have about 200 miles laid out at an estimated cost of \$300,000 including bridges; we expect at the end of ten years to have the system completed and to have 200 miles of good roads and permanent bridges, which will be a great start and a great improvement over what has been done in the past.

Now that we have been promised additional Government assistance I feel that we have reached the turn of the tide in the matter of road building in Ontario, and that great things are in store for our Association in the future.

I am not an orator or an expert in road building, but am pleased to have met you all, hope to have the pleasure of meeting you again, and I wish the Association all prosperity and success in the future.

ADDRESS.

MR. W. C. BUSH.

This work is one of the greatest that anyone could take up; it is an inspiration in the conception of it; and it is an inspiration in working it out. Good road building demands intelligent labour. I was glad to hear the Minister say that he was going to be more severe in his inspections; we do not want any second rate work, and the ideal which we have set before us will, I trust, be reached—good roads for all Ontario. I am sure when we get back home and have a chance to think over what has been done and to read over the minutes of the proceedings, to note the attention that has been paid to us by the Government and by the newspapers, that we will come to the conclusion that this is one of the greatest movements of the 20th century.

This Association is largely composed of voluntary good road builders; a gentleman from the United States said that there was no distinction between a road builder and a road engineer; that seems to be a matter that has caused some difficulty in some townships. Where the counties take up this work and do it they can afford to engage the services of a properly qualified engineer to superintend the work, but in the townships it is very difficult to get any money spent out of the ordinary rut for road construction. It is almost impossible to get a properly qualified supervisor to see that the work is done economically and effectively.

We should not be afraid to be called too progressive; sometimes when we go into a township and suggest the advisability of abolishing statute labour, and substituting a businesslike, up-to-date system, we need not and we should not feel afraid to be called too progressive, for progress means evolution, and there is no movement in which evolution is shown so effectively as in the development of a good roads system.

The extension of the rural free delivery system with its daily mail depends upon good roads; the ability of our children to get an education is in many instances affected by it, and the motor car industry which has been so much abused, recognize, as we do, that the movement for good roads is in the very near future going to do much for the development of the country.

By this, too, the emigration that has been going on from the country to the city will be impeded. Not only so, but as life in the country is made more attractive, the intelligent people in the city will be going back to the land, and those who are going back to the land in Ontario are the most advanced and the most educated people. Those that are earning their living in that way are living the most healthy and enlightened life that any one can live.

The development of the fruit growing industry is largely dependent upon good roads. We have had several miles of roads built, and have had the question of statute labour before the people. They have voted to do away with it. In connection with road building one of the most important things to look after is drainage; you must keep the surface of the road well drained and have a proper fall to the outlet.

Another point is the relation between the cities and the townships, the residents of which travel over our good roads. I refer to a bad state of things existing within the city of St. Catharines. For years we have been asking the Board of Works to improve the bridges, and I understand that only this year some of the main bridges are to be improved.

MR. PUGSLEY: I have attended all the conventions of the western Good Roads Association, have been very much pleased, and have secured a great deal of information at this meeting. I do not think we ever had in the history of the Association a convention that has helped us all so much as this one has. I was very glad to hear at the Parliament Buildings that our scheme may be taken up favorably by the Government, and acted upon along the lines that we laid down. I hope before long that we will find that not only twenty counties but all the counties have taken up the matter of good roads.

MR. HANLEY: I think that a fee of \$25 for the counties is rather excessive, and therefore I move the reconsideration of that question.

THE CHAIRMAN put the motion and declared it carried.

MR. HANLEY: I move that the fee be \$15 instead of \$25. Carried.

MR. TALBOT (Chairman of the Nominating Committee): It has been a rather difficult matter to make a selection of members of the Executive so as to get them equally distributed; we have tried to get men in parts of the Province that were not represented in the former appointments, and we recommend the following names: Messrs. Sanderson, Wheelock, Squires, Fairbanks, and McKay.

On motion the report of the Nominating Committee was adopted.

MR. KENNEDY: On behalf of the officers I beg to thank you for the honour you have done us; we greatly appreciate it and will do all we can to advance the interests of the Association.

Moved by K. W. MCKAY, seconded by J. A. SANDERSON, that the president arrange for the transfer of the accounts from Col. Farewell to Mr. Henry, and that the auditors be then asked to report. Carried.

Moved by W. T. ULLENS, seconded by J. W. MCGUIGAN, that whereas the only available means for obtaining metal for road construction in a large number of municipalities is by shipping the necessary stone from the stone quarries over the railroads, and whereas the present railroad freight rates are so excessive as to almost prohibit shipping long distances; therefore be it resolved that the Provincial and Federal Governments be requested to make such arrangements with the railways in regard to freight rates, switching and interswitching charges, as will relieve the municipalities from the excessive charges now made. Carried.

Moved by MR. TALBOT, seconded by MR. McCALLUM: That increased grants should be made by the Provincial Government where road material is not available within the township wherein roads are being constructed, or where road material, if available, requires expensive machinery to prepare the metal for the roads.

MR. VERMILYEA: It seems to me that the resolution is premature; I have no doubt at all that out of the amounts given by the Dominion Government and the Ontario Government that the proportion will be more than 60 per cent. I do not think that we can give it the careful consideration that we ought to do to-day.

MR. PUGSLEY: Leave it over till the next meeting; we cannot consider it properly now.

On a vote being taken the motion was declared laid over till next meeting.

Moved by MR. FAREWELL, seconded by MR. VERMILYEA: That Mr. W. H. Pugsley be appointed an additional honorary president. Carried amid applause.

Moved by MR. VERMILYEA that the next annual meeting be held in Toronto. Carried.

Moved by MR. PUGSLEY, seconded by MR. GRIFFIN, that the Secretary-Treasurer receive the usual honorarium for the coming year. Carried.

Moved by MR. TALBOT, seconded by MR. ULLENS: That the Provincial Legislature be requested to so amend the Municipal Act as to authorize township or county councils to issue debentures for the erection of steel or concrete bridges to renew or replace the present structures where they deem it necessary to do so. Carried.

Convention then adjourned.

FINANCIAL STATEMENT, 1911-12

February, 1912

Receipts.

Government of Ontario	\$300 00
County of York, 1911	10 00
County of Middlesex, 1911	10 00
County of Norfolk	10 00
City of Hamilton	10 00
Town of Port Hope	10 00
County of Simcoe	10 00
County of Haldimand	10 00
County of Peel	10 00
County of Waterloo	10 00
County of Brant	10 00
County of Lennox and Addington	10 00
County of Ontario	10 00
County of Wellington	10 00
County of Middlesex	10 00
County of Huron	10 00
County of Perth	10 00
County of Carleton	10 00
Town of Berlin	10 00
Village of Richmond Hill	5 00
Town of Barrie	10 00
Town of Galt	10 00
Town of Midland	5 00
Town of Tillsonburg	5 00
County of Norfolk	10 00
County of Hastings	10 00
County of Leeds and Grenville	10 00
Total Receipts	\$545 00

Expenditures.

Balance due Treasurer	\$23 18
Annual Meeting Accounts, 1911	49 16
Printing, Postage, Express, etc.	270 17
Annual Meeting, 1912	124 00
Secretary-Treasurer	50 00
Balance on Hand	28 49
Total	\$545 00



HON. J. O. REAUME
MINISTER PUBLIC WORKS, ONTARIO



ROBERT EDGAR
SECRETARY LABOUR BUREAU

TWELFTH REPORT
OF
The Bureau of Labour
OF THE
PROVINCE OF ONTARIO
For the Year Ending December 31st
1911

PRINTED BY ORDER OF
THE LEGISLATIVE ASSEMBLY OF ONTARIO



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1912

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TORONTO.

TO HIS HONOUR SIR JOHN MORISON GIBSON, K.C.M.G., K.C., LL.D., etc., etc.,
Lieutenant-Governor of Ontario.

May it Please Your Honour:

The undersigned has the honour to present herewith for your consideration the Report of the Bureau of Labour of the Province of Ontario for the year 1911.

I have the honour to be,

Your Honour's most obedient servant,

J. O. REAUME,

Minister of Public Works.

TO THE HONOURABLE J. O. REAUME,

Minister Public Works, Ontario:

SIR,—I have the honour of submitting to you herewith the Twelfth Report of the Bureau of Labour.

I have the honour to be, Sir,

Your obedient servant,

ROBT. EDGAR,

Secretary.

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TWELFTH REPORT

OF THE

BUREAU OF LABOUR

1911.

INTRODUCTION.

The Twelfth Report of the Bureau of Labour of the Province of Ontario can report its usual statement of the increase and progress of the work of the Bureau.

The five free employment bureaus established at Berlin, Brantford, Hamilton, London and Ottawa have increased their operations. Applicants to the number of 748 have been provided with situations.

There has been an increase in the number of returns by municipal clerks, there having been 786 as compared with 769 for 1909 and 756, 704, 559, and 227 for the four preceding years. This result was only obtained by much work which ought to be unnecessary, many of the clerks requiring repeated notices before reporting, or to induce them to make their returns more complete. The difficulties they allege in this connection give evidence of an unsatisfactory condition of the book-keeping, not even excepting some of the urban municipalities. The tabulated statistics show satisfactory municipal progress. There were reported 21,917 new buildings erected in 1910, costing \$48,415,750; expenditure on permanent improvements, such as roadways, bridges, etc., \$6,037,664; and on sanitation, including sewers, \$2,110,006. The 18 cities report 13,747 new buildings, costing \$31,604,422; expenditure on permanent improvements, \$3,301,460; and on sanitation, \$1,557,967. The 124 towns reporting (4 persisting in not doing so, in spite of numerous appeals), give 2,764 new buildings, costing \$8,271,391; expenditure on permanent improvements, \$1,015,502; and on sanitation, \$481,683. The 133 incorporated villages, one not reporting, give 631 new buildings, costing \$1,138,275; expenditure on permanent improvements, \$134,777; and on sanitation, \$10,165. The 506 townships or groups of townships reporting, about 30 not doing so, give 4,845 new buildings, costing \$4,401,662; expenditure on permanent improvements, \$1,554,138; and on sanitation, \$59,726. In the reports of the clerks, given in detail, there is useful information as to the industrial establishments started during the year, and the openings for other industries.

The statistics given in the last two Annual Reports of public utilities owned and operated by the municipalities are continued, showing that their capitalization has increased to considerably over \$33,000,000 for the municipalities making returns. The 18 cities report assets of this nature amounting to \$33,834,057, towns \$9,382,034, villages \$1,038,480, and townships \$157,133. In another table these public utilities are classified as follows: waterworks, \$26,827,122; electric lighting, \$438,706; gas, \$285,400; street railways, \$1,156,012; power, \$778,404; telephone, \$434,413; miscellaneous, \$20,000.

The returns by the labour organizations have increased, being 384, as compared with 335 last year and 358, 320, 271 and 156 for the four previous years. To those acquainted with organized labour, it is evident that these returns are incomplete, some unions still neglecting to give the required information, a reticence not prevailing elsewhere, as in all other countries where labour is organized the returns are far more complete, there being an apparent willingness to make the best showing possible. Some secretaries have a strange habit, while stating the hourly wages accurately, of under-stating the weekly wages according to their own figures, apparently dividing the year's wages by the 52 weeks, though this is provided for by the column giving the average number of days idle. This is creating an unnecessary difficulty when claiming the usual wages on public contracts, and this will be still more the case if the promised legislation on Compensation to Workmen follows the British Act in basing payment on the weekly wages.

There is a continuation of the increase in returns from manufacturers, there being 759 as compared with 679, 652, 592, 427, and 205 for the previous years. Of these only 52 were too incomplete for tabulation, leaving to be so treated 707 establishments, employing 51,095 persons as compared with 642 establishments employing 49,090; 610 employing 39,156; 536 employing 42,646; 384 employing 35,316; and 153 employing 8,505 in the 5 previous years. The aggregate number of days in operation in these 707 establishments was 202,326, as compared with 183,186; 172,573; 154,905; 113,434; and 43,718 in the preceding years. The product was \$122,726,571, as against \$111,392,169; \$95,479,586; \$100,097,507; \$83,198,546; and \$18,473,139 previously. The wages were \$23,361,134, as compared with \$21,392,444; \$16,681,496; \$19,123,227; \$15,869,337 and \$3,458,914, previously. The average wage rate per year was \$467.80, and per day, \$1.64, as compared with \$452.15 and \$1.58, \$433.99 and \$1.58, \$459.00 and \$1.60, \$449.43 and \$1.52, and \$406.69 and \$1.48, previously.

These statistics are not complete. There is no authoritative nominal list of the industrial establishments in Ontario, and they have to be obtained from various sources. Some of the manufacturers neglect to reply, and a comparatively small number refuse to give information. But there are a sufficient number, divided as they are into 32 categories, to give a fair idea of the general position in the various classes of industrial establishments.

In the following table, giving in condensed form the increases and decreases

in product and in wages, it appears that the average increase in product in all the classes was 16.62 per cent.: 50 establishments reported unspecified increases, 23 unspecified decreases, and 164 no change from previously. The average increase in wages in all the classes was 9.12 per cent.: 65 establishments reported unspecified increases: 7 unspecified decreases and 233 no change from formerly. None of the classes reported average specified decreases in wages and only one in product and very few reported unspecified decreases in either.

The notes of increases of wages and decreases of hours of labour show that the upward tendency still continues and is operating more widely.

The customary condensed notices of labour legislation, trade disputes, legal decisions, directories of labour organizations, and similar information are given.

The correspondence is continually augmenting, over 5,000 copies of the Eleventh Annual Report were sent out, the demand for them increasing. Schedules and circulars were mailed as usual to the secretaries of unions, the clerks of municipalities and manufacturers. There were also sent out over 1,000 letters giving information sought, asking for schedules or additional details and similar objects.

There were many personal interviews in relation to fair wages or hours in public contracts, labour legislation or decisions by the courts, industrial statistics, and such matters, including requests for information by University students and others studying political economy.

ROBT. EDGAR,

Secretary,

Bureau of Labour.

MUNICIPAL STATISTICS.

The following is a list of the cities, towns, incorporated villages and townships which responded to the schedules sent out to all the municipal clerks. Succeeding this are the reports in detail from the clerks giving accounts of the industries started in 1910 and the openings for others, besides the statistical information which is tabulated as usual. All the cities, nearly all the towns and villages, and all but about thirty of the townships made returns, the increase that has obtained for some years past being continued, but this was only secured by repeated applications in many cases, both for the reports themselves and for additional information where they were incomplete.

NOTE.—C. for City; Tn. for Town; V. for Village; Tp. for Township.

Aberdeen, Tp.	Bancroft, V.	Bridgeburg, V.	Cartwright, Tp.
Abinger, Tp.	Bangor, Wicklow, &	Bright Additional,	Casey, Tp.
Acton, V.	McClure, Tps.	Tp.	Cashel, Tp.
Adelaide, Tp.	Barrie, Tn.	Brighton, Tp.	Casselman, V.
Admaston, Tp.	Barrie, Tp.	Brighton, V.	Cassimir, Jennings,
Adolphustown, Tp.	Barton, Tp.	Brock, Tp.	and Appleby, Tps.
Alisa Craig, V.	Bastard and Burgess,	Brockville, Tn.	Cavan, Tp.
Alberton and Rod-	S., Tps.	Bromley, Tp.	Cavendish, Tp.
dick, Tps.	Bath, V.	Brooke, Tp.	Cayuga, V.
Albion, Tp.	Bathurst, Tp.	Brougham, Tp.	Cayuga, N., Tp.
Alexandria, Tn.	Bayfield, V.	Bruce, Tp.	Cayuga, S., Tp.
Alfred, Tp.	Bayham, Tp.	Bruce Mines, Tn.	Chaffey, Tp.
Algonia, S., Tp.	Beamsville, V.	Brudenell and Lyne-	Chamberlain, Tp.
Alice & Fraser, Tps.	Beaverton, V.	doch, Tps.	Chandos, Tp.
Alliston, Tn.	Beckwith, Tp.	Brunel, Tp.	Chapleau, Tp.
Almonte, Tn.	Bedford, Tp.	Brussels, V.	Chapman, Tp.
Alnwick, Tp.	Beeton, V.	Buchanan, Tp.	Chapple, Tp.
Alvinston, V.	Belle River, V.	Bucke, Tp.	Charlottenburg, Tp.
Amabel, Tp.	Belmont & Methuen,	Burford, Tp.	Charlottetown, Tp.
Amaranth, Tp.	Tps.	Burgess, N., Tp.	Chatham, C.
Ameliasburgh, Tp.	Belleville, C.	Burgess, S., Tp.	Chatsworth, V.
Amherst Island, Tp.	Bentinck, Tp.	Burk's Falls, V.	Chelmsford, Tn.
Amherstburg, Tn.	Berlin, Tn.	Burleigh, Tp.	Chesley, Tn.
Ancaster, Tp.	Bertie, Tp.	Burlington, V.	Chesterville, V.
Anderdon, Tp.	Beverly, Tp.	Burns, Tp.	Chinguacousy, Tp.
Anglesea, Tp.	Bexley, Tp.	Burpee, Tp.	Chippawa, V.
Anson and Hindon,	Biddulph, Tp.	Cache Bay, Tn.	Christie, Tp.
Tps.	Billings, Tp.	Caistor, Tp.	Clara, Tp.
Anstruther, Tp.	Binbrook, Tp.	Caldwell, Tp.	Clarence, Tp.
Appelby, Tp.	Blandford, Tp.	Caledon, Tp.	Clarendon & Miller,
Arkona, V.	Blanshard, Tp.	Caledonia, Tp.	Tps.
Armour, Tp.	Blenheim, Tn.	Caledonia, V.	Clarke, Tp.
Arnprior, Tn.	Blezard, Tp.	Cambridge, Tp.	Clifford, V.
Arran, Tp.	Blind River, Tn.	Camden, Tp.	Clinton, Tn.
Artemesia, Tp.	Bloomfield, V.	Camden, E., Tp.	Clinton, Tp.
Arthur, Tp.	Blue, Tp.	Cameron, Tp.	Cobalt, Tn.
Arthur, V.	Blyth, V.	Canboro, Tp.	Cobden, V.
Ashby, Tp.	Blythfield, Tp.	Cannington, V.	Cobourg, Tn.
Ashfield, Tp.	Bobcaygeon, V.	Canonto, N., Tp.	Cochrane, Tn.
Assignack, Tp.	Bolton, V.	Canonto, S., Tp.	Cockburn Island, Tp.
Athens, V.	Bonfield, Tn.	Caradoc, Tp.	Colborne, Tp.
Athol, Tp.	Bosanquet, Tp.	Carden, Tp.	Colborne, V.
Atwood, Tp.	Bothwell, Tn.	Cardiff, Tp.	Colchester, N., Tp.
Augusta, Tp.	Bowmanville, Tn.	Cardinal, V.	Colchester, S., Tp.
Aurora, Tn.	Bracebridge, Tn.	Cardwell, Tp.	Coldwater, V.
Aylmer, Tn.	Bradford, V.	Carleton Place, Tn.	Coleman, Tp.
Ayr, V.	Brampton, Tn.	Carling, Tp.	Collingwood, Tn.
Bagot & Blythfield,	Brant, Tp.	Carlow, Tp.	Collingwood, Tp.
Tps.	Brantford, C.	Carnarvon, Tp.	Copper Cliff, Tn.
	Brantford, Tp.	Carrick, Tp.	Cornwall, Tn.
			Cornwall, Tp.

Courtright, V.	Elzevir and Grims-	Greenock, Tp.	Huntingdon, Tp.
Cramahe, Tp.	thorp, Tps.	Grey, Tp.	Huntley, Tp.
Creemore, V.	Embro, V.	Griffith and Mata-	Huntsville, Tn.
Crosby, N., Tp.	Emily, Tp.	watchan, Tps.	Huron, Tp.
Crowland, Tp.	Emo, Tp.	Grimsby, V.	
Culross, Tp.	Englehart, Tn.	Grimsby, N., Tp.	Ignace, Tp.
Cumberland, Tp.	Enniskillen, Tp.	Grimsby S., Tp.	Innisfil, Tp.
	Ennismore, Tp.	Grimsthorp, Tp.	Iroquois, V.
	Eramosa, Tp.	Guelph, C.	
Dack, Tp.	Erin, Tp.	Guelph, Tp.	Jaffray and Melick,
Dalhousie and Sher-	Erin, V.	Gulford, Tp.	Tps.
brooke, N., Tps.		Gwillimbury, E., Tp.	James, Tp.
Dalton, Tp.	Ernesttown, Tp.	Gwillimbury W., Tp.	Jarvis, V.
Darling, Tp.	Escott Front, Tp.	Gwillimbury N., Tp.	Jocelyn, Tp.
Darlington, Tp.	Esquesing, Tp.		Johnson, Tp.
Dawn, Tp.	Essa, Tp.		Joly, Tp.
Day & Bright Addl.,	Essex, Tn.	Hagar, Tp.	Jones, Tp.
Tps.	Efobicoke, Tp.	Hagarty & Richards,	
Delaware, Tp.	Euphemia, Tp.	Tps.	
Delhi, V.	Euphrasia, Tp.	Hagerman, Tp.	Kaladar, Anglesea
Denbigh, Abinger &	Exeter, Tn.	Hagersville, V.	and Effingham
Ashby, Tps.	Eyre, Tp.	Haileybury, Tn.	Tps.
Denison, Tp.		Haldimand, Tp.	Kearney, Tn.
Derby, Tp.	Faraday, Tp.	Hallam, Tp.	Keewatin, Tn.
Dereham, Tp.	Fenelon, Tp.	Hallowell, Tp.	Kemptville, V.
Deseronto, Tn.	Fenelon Falls, V.	Hamilton, C.	Kennebec, Tp.
Digby, Tp.	Ferris, Tp.	Hamilton, C.	Kenora, Tn.
Dilke, Tp.	Fergus, V.	Hanmer, Tp.	Keppel, Tp.
Dorchester, N., Tp.	Finch, V.	Hanover, Tn.	Kerns, Tp.
Douro, Tp.	Fitzroy, Tp.	Harburn, Tp.	Kincardine, Tn.
Dover, Tp.	Flamboro, E., Tp.	Harcourt, Tp.	Kincardine, Tp.
Downie, Tp.	Flamboro W., Tp.	Harley, Tp.	King, Tp.
Draper, Tp.	Flos, Tp.	Harriston, Tn.	Kingston, C.
Drayton, V.	Forest, Tn.	Harrow, Tp.	Kingston, Tp.
Dresden, Tn.	Fort Erie, V.	Harvey, Tp.	Kingsville, Tn.
Drummond, Tp.	Fort Frances, Tn.	Harwich, Tp.	Kinloss, Tp.
Drury, Denison, and	Fort William, C.	Hastings, V.	Kitley, Tp.
Graham, Tps.	Fraser, Tp.	Havelock, Tp.	Korah, Tp.
Dryden, Tn.	Fredericksburgh N.,	Havelock, V.	
Dudley, Tp.	Tp.	Hawkesbury, Tn.	Lake, Tp.
Dumfries, N., Tp.	Fredericksburgh, S.	Hawkesbury, E., Tp.	Lakefield, V.
Dumfries, S., Tp.	Tp.	Hawkesbury, W., Tp.	Lanark, Tp.
Dummer, Tp.		Hay, Tp.	Lanark, V.
Dundalk, V.	Gainsborough, Tp.	Head, Maria & Clara	Lancaster, Tp.
Dundas, Tn.	Galt, Tn.	Tps.	Lancaster, V.
Dunn, Tp.	Galway & Cavendish,	Hensall, V.	Lansdowne Front,
Dunnville, Tn.	Tps.	Hepworth, V.	Tp.
Dunwich, Tp.	Gananoque, Tn.	Herschell, Tp.	Latchford, Tn.
Durham, Tn.	Garafraxa E., Tp.	Hespeler, Tn.	Lavallee, Tp.
Dutton, V.	Garafraxa W., Tp.	Hibbert, Tp.	Lavant, Tp.
Dymond, Tp.	Garson, Tp.	Hilliard, Tp.	Lawrence, Tp.
Dysart, &c., Tps.	Georgetown, V.	Hillier, Tp.	Laxton, Digby and
	Georgina, Tp.	Hilton, Tp.	Longford, Tps.
Eastview, V.	Glamorgan, Tp.	Himsworth, N., Tp.	Leamington, Tn.
Easthope, N., Tp.	Glanford, Tp.	Himsworth, S., Tp.	Leeds & Lansdowne
Easthope, S., Tp.	Glencoe, V.	Hinchinbrooke, Tp.	Front, Tps.
Eastnor, Tp.	Gleneig, Tp.	Hindon, Tp.	Leeds & Lansdowne
Effingham, Tp.	Gloucester, Tp.	Holland Landing, V.	Rear, Tps.
Eganville, V.	Goderich, Tn.	Hope, Tp.	Limerick, Tn.
Egremont, Tp.	Goderich, Tp.	Horton, Tp.	Lindsay, Tn.
Ekfrid, Tp.	Gordon, Tp.	Houghton, Tp.	Lindsay, Tp.
Elderslie, Tp.	Gore Bay, Tn.	Howard, Tp.	Listowel, Tn.
Eldon, Tp.	Gosfield N., Tp.	Howe Island, Tp.	Little Current, Tn.
Elizabethtown, Tp.	Gosfield S., Tp.	Howick, Tp.	Livingston, Tp.
Ellice, Tp.	Goulburn, Tp.	Howland, Tp.	Lobo, Tp.
Elma, Tp.	Gower, N., Tp.	Hudson, Tp.	Lochiel, Tp.
Elmira, V.	Gower S., Tp.	Hullett, Tp.	Logan, C.
Elmsley, N., Tp.	Grand Valley, V.	Humberstone, Tp.	London, C.
Elmsley, S., Tp.	Grantham, Tp.	Humphrey, Tp.	London, Tp.
Elora, V.	Gravenhurst, Tn.	Hungerford, Tp.	Longford, Tp.

Longueuil, Tp.	Milton, Tn.	Orangeville, Tn.	Ratter and Dunnett,
L'Orignal, V.	Milverton, V.	Oxford, Tp.	Ips.
Lorne, Tp.	Mimico, V.	Orillia, Tp.	Rawdon, Tp.
Loughboro, Tp.	Minden, Tp.	Oro, Tp.	Reach, Tp.
Lucan, V.	Minto, Tp.	Oshawa, Tn.	Renfrew, Tn.
Lucknow, V.	Mitchell, Tn.	Osnabruck, Tp.	Richards, Tp.
Luther, W., Tp.	Monaghan, N. Tp.	Oso, Tp.	Richmond, Tp.
	Monaghan, S., Tp.	Osprey, Tp.	Richmond, W., V.
McClintock, Tp.	Monck, Tp.	Otonabee, Tp.	Richmond Hill, V.
McClure, Tp.	Monmouth, Tp.	Ottawa, C.	Ridout, Tp.
McDougall, Tp.	Mono, Tp.	Owen Sound, Tn.	Ridgetown, Tn.
McGillivray, Tp.	Montague, Tp.	Oxford, Tp.	Rochester, Tp.
McIrvine, Tp.	Monteagle and Hers-	Oxford, E., Tp.	Rockland, Tn.
McKellar, Tp.	chel, Tps.	Oxford, N., Tp.	Roddick, Tp.
McKillop, Tp.	Moore, Tp.	Oxford, W., Tp.	Rodney, Tp.
McKim, Tp.	Morley, Tp.		Rolph, Buchanan &
McLean and Ridout	Mornington, Tp.	Paipoonge, Tp.	Wylie, Tps.
Tps.	Morris, Tp.	Paisley, V.	Romney, Tp.
McMurrich, Tp.	Morrisburg, V.	Pakenham, Tp.	Ross, Tp.
McNab, Tp.	Moulton, Tp.	Palmerston, Tn.	Roxborough, Tp.
Macaulay, Tp.	Mount Forest, Tn.	Palmerston & Can-	Russell, Tp.
Macdonald, Meredith	Mulmur, Tp.	onto N. & S., Tps.	Ryde, Tp.
and Aberdeen Tps.	Murray, Tp.	Papineau, Tp.	Ryerson, Tp.
Machar, Tp.	Muskoka, Tp.	Paris, Tn.	
Machin, Tp.		Parkhill, Tn.	St. Catharines, C.
Madoc, Tp.	Nairn and Lorne,	Parry Sound, Tn.	St. Joseph, Tp.
Madoc, V.	Tps.	Peel, Tp.	St. Marys, Tn.
Maidstone, Tp.	Napanee, Tn.	Pelee Island, Tp.	St. Thomas, C.
Malahide, Tp.	Nassagaweya, Tp.	Pelham, Tp.	St. Vincent, Tp.
Malden, Tp.	Neebing, Tp.	Pembroke, Tn.	Salter, May & Har-
Manvers, Tp.	Neelon and Garson,	Pembroke, Tp.	row, Tps.
Mara, Tp.	Tps.	Penetanguishene, Tn.	Saltfleet, Tp.
March, Tp.	Nelson, Tp.	Percy, Tp.	Sandfield, Tp.
Maria, Tp.	Nepean, Tp.	Petawawa, Tp.	Sandwich, Tn.
Mariposa, Tp.	Nepigon, Tp.	Peterborough, C.	Sandwich, E., Tp.
Markham, Tp.	Neustadt, V.	Perth, Tn.	Sandwich, S., Tp.
Markham, V.	New Hamburg, V.	Pickering, Tn.	Sandwich, W., Tp.
Marlboro', Tp.	New Liskeard, Tn.	Picton, Tn.	Sarawak, Tp.
Marmora and Lake,	Newboro, V.	Pikington, Tp.	Sarnia, Tn.
Tps.	Newburgh, V.	Pittsburg, Tp.	Sarnia, Tp.
Marmora, V.	Newbury, V.	Plantagenet, N., Tp.	Saugeen, Tp.
Martland, Tp.	Newcastle, V.	Plummer Addl., Tp.	Sault Ste. Marie, Tn.
Maryborough, Tp.	Newmarket, Tn.	Plympton, Tp.	Scarborough, Tp.
Marysburg S., Tp.	Niagara, Tn.	Point Edward, V.	Scott, Tp.
Marysburg N., Tp.	Niagara, Tp.	Port Arthur, C.	Schreiber, Tp.
Massey, Tn.	Niagara Falls, C.	Port Carling, V.	Seugog, Tp.
Matawatchan, Tp.	Nicholl, Tp.	Port Colborne, V.	Seaforth, Tn.
Matchedash, Tp.	Nightingale, Tp.	Port Dalhousie, V.	Sebastopol, Tp.
Matilda, Tp.	Nipissing, Tp.	Port Dover, V.	Seneca, Tp.
Mattawa, Tn.	Nissouri, E., Tp.	Port Elgin, V.	Seymour, Tp.
Mattawan, Tp.	Nissouri, W., Tp.	Port Hope, Tn.	Sheffield, Tp.
Maxville, V.	North Bay, Tn.	Port Perry, V.	Shelburne, V.
May, Tp.	Norwich, V.	Port Rowan, V.	Sherbrooke, Tp.
Mayo, Tp.	Norwich, N., Tp.	Port Stanley, V.	Sherbrooke, N., Tp.
Meaford, Tn.	Norwich, S., Tp.	Portland, Tp.	Sherbrooke, S., Tp.
Medonte, Tp.	Norwood, V.	Portsmouth, V.	Sherwood, Jones and
Medora and Wood,	Nottawasaga, Tp.	Powassan, Tn.	Burns, Tps.
Tps.		Prescott, Tn.	Shuniah, Tp.
Melancthon, Tp.	Oakland, Tp.	Preston, Tn.	Sidney, Tp.
Melick, Tp.	Oakley, Tp.	Prince, Tp.	Simcoe, Tn.
Merrickville, V.	Oakville, Tn.	Puslinch, Tp.	Smith, Tp.
Merritton, V.	O'Connor, Tp.		Smith's Falls, Tn.
Mersea, Tp.	Oil Springs, V.	Radcliffe, Tp.	Snowdon, Tp.
Metcalfe, Tp.	Olden, Tp.	Raglan, Tp.	Sombra, Tp.
Methuen, Tp.	Oliver, Tp.	Rainham, Tp.	Somerville, Tp.
Middleton, Tp.	Omeme, V.	Rainy River, Tn.	Sophiasburgh, Tp.
Midland, Tn.	Oneida, Tp.	Raleigh, Tp.	South River, Tr.
Millbrook, V.	Onondaga, Tp.	Rama, Tp.	Southampton, Tn.
Miller, Tp.	Ops, Tp.	Ramsay, Tp.	Southwold, Tp.

REPORTS FROM MUNICIPAL CLERKS.

ALBERTON, Tp.—Number of buildings erected, 9; cost \$3,000. Amount expended on permanent improvements, \$2,632. Hector Elliott, Township Clerk, Fort Frances.

ALBION, Tp.—Number of buildings erected, 10; cost \$15,000. Amount expended on permanent improvements, \$3,000. Robert Matson, Township Clerk, Palgrave.

ALEXANDRIA, Tn.—Coupling factory and construction plant started. Owns and operates waterworks and electric light plant; cost \$12,420. Good openings for furniture factory, woollen factory and match factory. Number of buildings erected, 2; cost, \$20,650. Amount expended on permanent improvements, \$8,000. Amount expended on sanitation, \$500. S. Macdonald, Town Clerk, Alexandria.

ALFRED, Tp.—New peat works about to open. Number of buildings erected, about 25; cost about \$20,000. Amount expended on permanent improvements, \$1,200. B. G. Parisien, Township Clerk, Alfred.

ALGONA S. Tp.—Good opening for saw-mill. Number of buildings erected, 2; cost \$200. Amount expended on permanent improvements, \$15. John P. Nelan, Township Clerk, Castile.

ALICE AND FRASER, Tps.—Good openings for two cheese factories. Number of buildings erected, 5; cost \$3,000. Amount expended, \$800, including \$600 by Ontario Government. J. M. Kennedy, Township Clerk, Pembroke.

ALLISTON, Tn.—Owns and operates waterworks for fire protection, etc., cost \$19,000. Good openings for boot and shoe factory, and for wooden-ware industries. Number of buildings erected, 4; cost \$7,000. Amount expended on permanent improvements, \$400. Amount expended on sanitation, \$100. W. M. Lockhart, Town Clerk, Alliston.

ALMONTE, Tn.—Owns and operates electric light and water power: cost \$40,000. Good opening for various industries with free water power, and other advantages. Amount expended on permanent improvements, \$3,000. Amount expended on sanitation, \$2,000. J. T. Kirkland, Town Clerk, Almonte.

ALNWICK, Tp.—Number of buildings erected, 3; cost, \$2,000. Amount expended on permanent improvements, about \$2,000. Jas. Roberts, Township Clerk, Roseneath.

ALVINSTON, V.—Good openings for foundry, sugar factory, and industries requiring timber. Number of buildings erected, 2; cost, \$1,400. Amount expended on permanent improvements, \$1,132. Amount expended on sanitation, \$205. John Irving, Village Clerk, Alvinston.

AMABEL, Tp.—Number of buildings erected, 5; cost \$4,000. Amount expended on permanent improvements, \$3,773. R. H. Murray, Township Clerk, Allenford.

AMARANTH, Tp.—Number of buildings erected, 5; cost, \$7,000. Amount expended on permanent improvements, \$4,000. E. Hamilton, Township Clerk, Laurel.

AMELIASBURG, Tp.—An evaporater started. Number of buildings erected, 7; cost, \$8,000. Amount expended on permanent improvements, \$1,078. Amount expended on sanitation, \$40. F. C. File, Township Clerk, Ameliastburg.

AMHERST ISLAND, Tp.—Whey butter plant started. Number of buildings erected, 2; cost about, \$1,600. Wm. H. Moutray, Township Clerk, Stella.

AMHERSTBURG, Tn.—Fur coat and robe factory started. Owns and operates water works, value, \$11,500; street lighting, value \$4,500. Good opening for automobile factory. Number of buildings erected, 6; cost, \$31,500. Amount expended on new sewers, \$1,500. Geo. Gott, Town Clerk, Amherstburg.

ANCASTER, Tp.—Number of buildings erected about 100; cost, \$50,000. Amount expended on permanent improvements, \$1,441. Amount expended on sanitation, \$40. Henry Pim, Township Clerk, Ancaster.

ANDERDON, Tp.—Openings for various industries, with good shipping facilities by rail or water. Number of buildings erected, 7; cost, \$6,975. Amount expended on permanent improvements, \$3,339. A. C. Mailloux, Township Clerk, Gordon.

ANGLESEA, Tp.—See Kaladar, Anglesea and Elfringham Tps.

ANSON and HINDON, Tps.—No new buildings erected. Amount expended on permanent improvements, Government grant, \$150, and statute labour. W. A. Welch, Township Clerk, Minden.

ANSTRUTHER, Tp.—See Burleigh and Anstruther Tps.

APPLEBY, Tp.—See Cassimir, Jennings and Appleby Tps.

ARKONA, V.—Good opening for canning factories. No new buildings erected. Amount expended on permanent improvements, about \$100. Amount expended on sanitation, about \$50. J. Geo. Brown, Village Clerk, Arkona.

ARMOUR, Tp.—Considerable hardwood, such as is used for chemical works, and good site for such business. Number of buildings erected, 3; cost about, \$1,000. Amount expended on permanent improvements, \$1,206. Amount expended on sanitation, \$20. J. N. Dodds, Township Clerk, Burk's Falls.

ARNPRIOR, Tn.—Owns and operates waterworks; cost with sewerage system, about \$116,000. Good opening for machine shop, foundry, flour mill, knitting factory, furniture factory and other wood working industries. Number of buildings erected, 8; cost about, \$12,000. Amount expended on permanent improvements, \$2,146. Amount expended on sanitation, \$250. T. H. Grout, Town Clerk, Arnprior.

ARRAN, Tp.—One building erected, cost, 1,200. Amount expended on permanent improvements, \$2,999, besides about 2,500 days statute labour. Amount expended on sanitation, \$64. H. T. Potts, Township Clerk, Dunblane.

ARTEMESIA, Tp.—Good openings for flour mill, cheese factory and machine shop. Number of buildings erected, 5; cost \$20,000. Amount expended on permanent improvements, \$1,350. W. J. Bellamy, Township Clerk, Flesherton.

ARTHUR, Tp.—Milliner's shop opened at Kenilworth. Number of buildings erected, 6; cost \$7,500. Amount expended on permanent improvements, about \$3,000. Albert Hellyer, Kenilworth.

ARTHUR, V.—Good opening for various industries. Number of buildings erected, 2; cost \$2,500. Amount expended on permanent improvements, \$2,300. Amount expended on sanitation, \$35. D. T. Small, Village Clerk, Arthur.

ASHBY, Tp.—See Denbigh, Abinger and Ashby Tps.

ASHFIELD, Tp.—Cement tile factory started. Number of buildings erected, about 40; cost about \$20,000. Amount expended on permanent improvements, \$3,061. Amount expended on sanitation, \$30. Thos. G. Allen, Township Clerk, Dungannon.

ASSIGINACK, Tp.—Good openings for saw-mill and for sash and door factory. No new buildings erected. Amount expended on permanent improvements, \$1,700. A. J. McLean, Township Clerk, Manitowaning.

ATHENS, V.—One new building erected; cost \$1,000. G. F. Donnelly, Village Clerk, Athens.

ATHOL, Tp.—Good openings for factories of cheese boxes and apple barrels. Number of buildings erected, 6; cost, \$5,600. Amount expended on permanent improvements, \$1,800. W. Moore, Township Clerk, Cherry Valley.

ATWOOD, Tp.—Good openings for flour mill, barrel factory and brick yard. Number of buildings erected, 2; cost, \$1,100. Amount expended on permanent improvements, \$300. Hugh Carson, Township Clerk, Rainy River.

AUGUSTA, Tp.—Number of buildings erected about 18: cost about, \$10,000. Amount expended on permanent improvements, \$4,200, including \$1,200 under county road scheme. John Mellafont, Township Clerk, Algonquin.

AURORA, Tn.—Owns and operates waterworks: cost \$25,000. Openings for industries of all kinds. Number of buildings erected, over 40: cost about \$135,000. Amount expended on permanent improvements, \$5,000. Amount expended on sanitation, about \$500. S. H. Lundy, Town Clerk, Aurora.

AYLMER, Tn.—Shoe factory started. Owns and operates waterworks, cost \$100,000: electric light plant cost \$60,000. Good opening for foundry, machine shop and garage: 30 automobiles here and no place for repairs within 12 miles. Number of buildings erected, 12: cost, \$30,000. Amount expended on permanent improvements \$4,000. D. Davis, Town Clerk, Aylmer.

AYR, V.—Knitting factory started. Good opening for woodworking industries. No new buildings erected. Amount expended on permanent improvements about \$300. A. J. Reid, Village Clerk, Ayr.

BAGOT & BLYTHFIELD, Tps.—Good openings for pulp factory, flour mill and mineral developments. No new buildings erected. Amount expended on permanent improvements, \$500 by Government. J. J. Dillon, Township Clerk, Calabogie.

BALFOUR, Tp.—Number of buildings erected, 3: cost about \$1,500. Amount expended on permanent improvements \$800, Government grant. J. A. Bastien, Township Clerk, Chelmsford.

BANCROFT, V.—Good openings for woodenware and other industries, with hydro-electric power only partially developed. Number of buildings erected 2: cost \$2,000. Amount expended on permanent improvements, \$500. Geo. L. Jarman, Village Clerk, Bancroft.

BANGOR, WICKLOW & McCURE, Tps.—Good opening for woodworking industries. No new buildings erected. Amount expended on permanent improvements about \$400. M. E. Fitzgerald, Township Clerk, Maynooth.

BARRIE, Tn.—Gas producer and gasoline engine factory started. Owns and operates waterworks, cost \$123,188, electric light plant, \$84,659. Good opening for woodenware industries, knitting mill, tannery, shoe-factory, woollen mill and white-wear factory. Number of buildings erected about 40: cost about \$65,000. Amount expended on permanent improvements, \$2,000. Amount expended on sanitation, \$15,500, including \$15,000 for sewers. E. Donnell, Town Clerk, Barrie.

BARRIE, Tp.—No new buildings erected. Amount expended on permanent improvements \$22. Wm. T. Maynard, Township Clerk, Cloyne.

BARTON, Tp.—Number of buildings erected about 50: cost about \$50,000. Amount expended on permanent improvements \$19,242. Amount expended on sanitation, \$260. G. E. Bryant, Township Clerk, Hamilton.

BASTARD, and BURGESS S., Tps.—Number of buildings erected 2: cost \$7,000. Amount expended on permanent improvements, \$802. Amount expended on sanitation \$43. W. J. Birch, Township Clerk, Delta.

BATH, V. Cement block and brick plant and bakery started. Owns and operates lighting system, value about \$225. Good opening for fruit canning industry. Public and high school erected: cost about \$12,000. Amount expended on permanent improvements about \$350. Amount expended on sanitation about \$15. E. P. Shephard, Village Clerk, Bath.

BATHURST, Tp.—Several water powers available for industries. Number of buildings erected about 12 or 15: cost about \$12,000. Amount expended on perma-

nent improvements, \$622. Amount expended on sanitation \$20. R. M. Anderson, Township Clerk, Manion.

BAYFIELD, V.—Good openings for flax mill and other small industries. Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements \$659. H. W. Erwin, Village Clerk, Bayfield.

BAYHAM, Tp.—Good openings for canning factory, sash and door factory and steel works. No new buildings erected, and no expenditure on permanent improvements. Benj. Brian, Township Clerk, Straffordshire.

BEAMSVILLE, V.—Basket factory started. Owns and operates waterworks, cost \$27,000. Openings for various industries. Number of buildings erected, 8; cost \$10,000. Amount expended on permanent improvements, \$120. S. B. Bisbee, Village Clerk, Beamsville.

BEAVERTON, V.—Good opening for canning factory and for other industries: good shipping point with two railways and Trent Canal. Number of buildings erected 2; cost \$18,000. Amount expended on permanent improvements \$418. Amount expended on sanitation \$20. C. A. Paterson, Village Clerk, Beaverton.

BECKWITH, Tp.—Electric light plant started. Several dwelling houses and farm buildings erected. Amount expended on permanent improvements \$1,800. Amount expended on sanitation \$25. Peter McEwen, Township Clerk, Franktown.

BEDFORD, Tp.—Good opening for general merchant at Fermoy. Number of buildings erected 4; cost about \$7,000. Amount expended on permanent improvements \$1,200. Jas. McNeil, Township Clerk, Burridge.

BEETON, V.—Owns and operates waterworks, cost \$14,500; electric light plant \$50,000. Good opening for carriage factory and for canning factory. Number of buildings erected 2; cost \$1,000. Amount expended on permanent improvements \$600. Jos. Wright, Village Clerk, Beeton.

BELLE RIVER, V.—Good opening for beet sugar factory. No new buildings erected. Amount expended on permanent improvements \$300. L. Ducharm, Village Clerk, Belle River.

BELLEVILLE, C.—Owns and operates waterworks, cost about \$193,111, gas works, cost about \$95,000. Openings for all kinds of industries. Number of buildings erected 27; cost about \$30,000. Amount expended on permanent improvements \$18,539. Amount expended on sanitation, \$70,000 for sewers. W. C. Mikel, City Clerk, Belleville.

BELMONT and METHUEN, Tps.—Amount expended on permanent improvements \$1,200. W. H. Johnston, Township Clerk, Havelock.

BENTINCK, Tp.—Number of buildings erected about 15; cost about \$10,000. Amount expended on permanent improvements, \$3,190. Amount expended on sanitation \$28. Duncan Campbell, Township Clerk, Hanover.

BERLIN, Tn.—New furniture factory started. Owns and operates waterworks, cost \$216,271; electric light plant, cost \$341,155; street railway, cost \$127,046. Opening for industries of all kinds. Numbers of buildings erected, 136; cost \$347,547. Amount expended on permanent improvements, \$140,001. Amounts expended on sanitation, garbage system \$3,100; Board of Health \$1,200; sewers, \$9,928; total, \$14,228. A. H. Millar, Town Clerk, Berlin.

BERTIE, Tp.—Canadian Ship Building Co., purchased by Canada Foundry Co. Openings for various industries. Number of buildings erected 20; cost about \$25,000. Amount expended on permanent improvements \$5,075. Amount expended on sanitation \$293. M. S. Pound, Township Clerk, Ridgeway.

BEVERLY, Tp.—Number of buildings erected 7; cost \$20,000. Amount expended on permanent improvements \$3,151. Wm. Wood, Jr., Township Clerk, Rockton.

BENLEY, Tp.—Number of buildings erected 2; cost \$600. Amount expended on permanent improvements \$750. Alfred Taylor, Township Clerk, Victoria Road.

BINDULPH, Tp.—Good opening for drain tile yard. Amount expended on permanent improvement, \$4,373. Amount expended on sanitation \$13. W. D. Stanley, Township Clerk, Granton.

BILLINGS, Tp.—Harness shop and photographic gallery started. Good openings for cement plant, etc. Amount expended on permanent improvements \$1,700. Wm. M. Boyd, Township Clerk, Kakawong.

BINBROOK, Tp.—Number of buildings erected 15; cost about \$10,000. Amount expended on permanent improvements \$1,498. Wm. B. Switzer, Township Clerk, Binbrook.

BLANDFORD, Tp.—Number of buildings erected 15; cost about \$4,000. Amount expended on permanent improvements \$1,855. Amount expended on sanitation \$122. W. G. Henderson, Township Clerk, Bright.

BLANSHARD, Tp.—New chopping mill started. Number of buildings erected about 10; cost about \$10,000. Amount expended on permanent improvements \$2,000. John H. Jameson, Township Clerk, Rannoch.

BLENHEIM, Tn.—Owns and operates electric light system, value \$12,500. Good openings for canning factory and other industries. Number of buildings erected 3; cost \$5,000. P. S. Shillington, Town Clerk, Blenheim.

BLENHEIM, Tp.—Number of buildings erected 5; cost \$4,200. Amount expended on permanent improvements, \$8,698. Hugh Allan, Township Clerk, Richwood.

BLEZARD, Tp.—Good opening for carding and woollen mill, butter factory, saw mill. Number of buildings erected 3; cost \$3,800. Amount expended on permanent improvements \$1,435. G. Bonin, Township Clerk, Blezard Valley.

BLIND RIVER, Tn.—Good openings for tannery, sash and door factory, box factory, chemical works, hardwood manufacturing, system of waterworks for town. Number of buildings erected 11, cost about \$12,500. Amount expended on permanent improvements \$2,249. Amount expended on sanitation \$95. John Muncaster, Jr., Town Clerk, Blind River.

BLOOMFIELD, V.—Openings for small industries using steam power. One building erected; cost about \$1,800. Amount expended on permanent improvements, cost about \$5,000. C. H. Saylor, Village Clerk, Bloomfield.

BLUE, Tp.—See Worthington and Blue Tps.

BLYTH, V.—Owns and operates electric light plant, value \$4,000. Good openings for salt works, flax mill, foundry and knitting factory. Number of buildings erected 2; cost about \$4,000. Amount expended on permanent improvements \$600. Amount expended on sanitation about \$50. A. Elder, Village Clerk, Blyth.

Blythfield, Tp.—See Bagot and Blythfield Tps.

BOBCAYGEON, V.—Owns and operates electric light plant; cost \$25,000. Good openings for industries using wood or limestone. Number of buildings erected 5; cost about \$4,925. Amount expended on permanent improvements \$1,086. Chas. E. Stewart, Village Clerk, Bobcaygeon.

BOLTON, V.—Light, heat and power plant started. Good openings for blacksmith and foundry. Number of buildings erected 3; cost about \$5,000. Amount

expended on permanent improvements about \$900. John McDonald, Village Clerk, Bolton.

BONFIELD, Tn.—No new buildings erected. Amount expended on permanent improvements \$500. J. Moran, Town Clerk, Bonfield.

BOSANQUET, Tp.—Number of buildings erected 8; cost \$8,600. Amount expended on permanent improvements, \$3,092. Geo. Sutherland, Township Clerk, Thedford.

BOTHWELL, Tn.—Owns and operates street lighting plant, cost \$6,600, waterworks for fire protection, cost \$4,500. Good opening for canning factory. Number of houses erected 2; cost about \$1,800. W. H. Bradley, Town Clerk, Bothwell.

BOWMANVILLE, Tn.—Glove and mitt factory started. Owns and operates electric light plant, cost \$16,000 (since sold). Good openings for small manufacturers requiring electric power. One building erected, a factory costing about \$20,000. Amount expended on permanent improvements \$25,000. John Lyle, Town Clerk, Bowmanville.

BRACEBRIDGE, Tn.—Owns and operates water works and electric power, and light plant; cost \$163,000. Good openings for boot and shoe factory and woodenware industries. Number of buildings erected 6; cost \$7,400. Amount expended on permanent improvements \$4,000. Alex. C. Salmon, Town Clerk, Bracebridge.

BRADFORD, Tn.—Number of buildings erected 2; cost \$6,000. Amount expended on permanent improvements about \$1,500. Robt. Stewart, Town Clerk, Bradford.

BRAMPTON, Tn.—Owns and operates waterworks; cost \$160,000. Good openings for industries with hydro-electric power. Number of buildings erected 30; cost \$50,000. Amount expended on permanent improvements \$14,176. Amount expended on sanitation \$6,280. W. C. Young, Town Clerk, Brampton.

BRANT, Tp.—Number of buildings erected 13; cost \$21,600. Amount expended on permanent improvements \$3,259. Amount expended on sanitation \$218. M. A. McCallum, Township Clerk, Malcolm.

BRANTFORD, C.—Electric goods factory, emery wheel factory and machine and motor factory started. Owns and operates waterworks; cost \$474,817. Good openings and aid for industries. Number of buildings erected 377; cost \$681,030. Amount expended on permanent improvements \$279,694. Amount expended on sanitation \$104,215. H. F. Leonard, City Clerk, Brantford.

BRANTFORD, Tp.—Openings for various industries, good sites and transportation. Number of buildings erected about 75; cost \$75,000. Amount expended on permanent improvements, \$12,838. Amount expended on sanitation \$12,140. J. A. Smith, Township Clerk, Brantford.

BRIDGEBURG, Tn.—Varnish works and factory for registers started. Owns and operates waterworks; cost \$50,505. Good openings for industries. Number of buildings erected 20; cost \$40,000. Amount expended on permanent improvements \$2,000. Amount expended on sanitation \$38,534. R. A. Land, Town Clerk, Bridgeburg.

BRIGHT ADDL., Tp.—See Day and Bright Tps.

BRIGHTON, Tp.—Good opening for electric railway from north to south. Number of buildings erected 10; cost \$30,000. Amount expended on permanent improvements \$2,500. Amount expended on sanitation \$115. Fred A. Wade, Township Clerk, Brighton.

BRIGHTON, V.—Good openings for manufacturing industries. Number of buildings erected 3; cost \$5,000. Amount expended on permanent improvements

\$1,200. Amount expended on sanitation \$500. T. C. Lockwood, Village Clerk, Brighton.

BROCK, Tp.—Number of buildings erected 8; cost about \$12,000. Amount expended on permanent improvements \$4,935, and statute labour \$3,341. Amount expended on sanitation \$248. Frank Doble, Township Clerk, Sunderland.

BROCKVILLE, Tn.—Automobile factory started. Owns and operates waterworks, cost \$230,000; lighting plant, \$225,000. Openings for industries of any character. Number of buildings erected 52; cost \$109,500. Amount expended on permanent improvements \$27,500. Amount expended on sanitation \$4,465. Geo. K. Dewey, Town Clerk, Brockville.

BROMLEY, Tp.—Openings for industries of many kinds. One building erected, cost about \$2,500. Amount expended on permanent improvements \$830. Jas. D. Walsh, Township Clerk, Osceola.

BROOKE, Tp.—Number of buildings erected 4; cost \$10,000. Amount expended on permanent improvements about \$2,000. Amount expended on sanitation \$34. W. G. Willoughby, Township Clerk, Watford.

BROUGHAM, Tp.—Good opening for mining. No new buildings erected. Amount expended on permanent improvements \$25. Mich. Sheedy, Township Clerk, Mt. St. Patrick.

BRUCE, Tp.—Openings for summer resorts on Lake Huron and for railway. Number of buildings erected 10; cost \$5,100. Amount expended on permanent improvements \$3,570. J. G. MacKay, Township Clerk, Underwood.

BRUCE MINES, Tn.—No new buildings erected. Amount expended on permanent improvements \$4,000. Thos. Sullivan, Town Clerk, Bruce Mines.

BRUDENELL AND LYNEDOCH, Tps.—Good opening for flour mill and sawmill. Amount expended on permanent improvements \$285. W. J. Whelan, Township Clerk, Brudenell.

BRUNEL, Tp.—Good openings for sawmill and wood factories. Number of buildings erected 2; cost \$500. Amount expended on permanent improvements \$700. Henry Farnsworth, Township Clerk, Huntsville.

BRUSSELS, V.—Good opening for salt works. One building erected; cost \$5,000. Amount expended on permanent improvements \$300. Amount expended on sanitation \$400. F. S. Scott, Village Clerk, Brussels.

BURTON, Tp.—See Dysart, etc., Tps.

BUCHANAN, Tp.—See Rolfe, Buchanan and Wylie Tps.

BUCKE, Tp.—Manufacture of explosives and two lumber mills started. Good opening for woollen mill. Number of buildings erected about 50; cost about \$25,000. Amount expended on permanent improvements \$4,800. Amount expended on sanitation \$200. H. McQuarrie, Township Clerk, Haileybury.

BURFORD, Tp.—New canning works started. Good openings for planing mill, sash and door factory, creamery and chopping mill. Number of buildings erected 60; cost about \$10,000. Amount expended on permanent improvements, \$11,000. Phil. Kelly, Township Clerk, New Durham.

BURGESS, N., Tp.—No new buildings erected. Amount expended on permanent improvements \$80. R. T. Noonan, Township Clerk, Micaville.

BURGESS, S., Tp.—See Bastard and Burgess, S., Tps.

BURKS FALLS, V.—Owns and operates waterworks; cost \$37,000. Good openings for pulp works, paper factory, boot and shoe factory, and other industries requiring waterpower. Number of buildings erected 3; cost \$7,900. Amount expended on permanent improvements \$583. Amount expended on sanitation \$10. Chas. McArthur, Village Clerk, Burks Falls.

BURLEIGH AND ANSTRUTHER, Tps.—Number of buildings erected about 4; cost about \$2,000. Amount expended in permanent improvements about \$350. Wm. Gallon, Township Clerk, Apsley.

BURLINGTON, V.—Fruit spray works started. Owns and operates waterworks; cost \$50,000. Number of buildings erected about 20; cost about \$50,000. Amount expended on permanent improvements about \$1,500. Amount expended on sanitation \$800. O. T. Springer, Village Clerk, Burlington.

BURPEE, Tp.—One building erected; cost \$1,200. Amount expended on permanent improvements \$600. Norman Bailey, Township Clerk, Evansville.

BURNS, Tp.—See Sherwood, Jones and Burns Tps.

CACHE BAY, Tn.—Good openings for bakery and general store. Number of buildings erected 3; cost \$2,000. Amount expended on permanent improvements \$885. Amount expended on sanitation \$27. Fred Schroeder, Town Clerk, Cache Bay.

CAISTOR, Tp.—Number of buildings erected 8; cost \$4,000. Amount expended on permanent improvements \$1,500. Albert Shields, Township Clerk, Caistorville.

CALDWELL, Tp.—Number of buildings erected 15; cost \$12,000. Amount expended on permanent improvements \$3,000. Amount expended on sanitation \$1,000. Ed. Beaudoin, Township Clerk, Verner.

CALEDON, Tp.—Good openings for various industries. Number of buildings erected about 8; cost about \$10,000. Amount expended on permanent improvements about \$8,000. J. L. Meek, Township Clerk, Alton.

CALEDONIA, Tp.—Number of buildings erected 6; cost about \$6,000. Amount expended on permanent improvements \$1,000. R. L. Downing, Township Clerk, Routhier.

CALEDONIA, V.—Good openings for planing mill, sash and door factory, foundry and woollen factory. Number of buildings erected six; cost about \$14,000. Amount expended on permanent improvements \$1,250. Amount expended on sanitation \$25. Thos. Hassard, Village Clerk, Caledonia.

CAMBRIDGE, Tp.—Number of buildings erected 4; cost about \$5,200. Amount expended on permanent improvements about \$2,000. J. B. Sanche, Township Clerk, Casselman.

CAMDEN, Tp.—Good openings for cement or clay tile works. Number of buildings erected 7; cost about \$14,000. Amount expended on permanent improvements \$2,000. M. S. Blackburn, Township Clerk, Dresden.

CAMDEN, E., Tp.—Number of buildings erected about 3; cost about \$6,000. Amount expended on permanent improvements \$1,000. Amount expended on sanitation \$100. T. E. McGill, Township Clerk, Centreville.

CAMERON, Tp.—Good openings for sawmill and pulp mill, with abundant waterpower. One house erected; cost \$700. Amount expended on permanent improvements about \$30. S. J. McMeekin, Township Clerk, Mattawa.

CANBORO, Tp.—Amount expended on permanent improvements \$1,972. Amount expended on sanitation \$29. Donald McCallum, Township Clerk, Canboro.

CANNINGTON, V.—Factory of automobile bodies started. Good openings for almost any kind of industry. One building erected; cost \$1,700. Amount expended on permanent improvements about \$500, and other work uncompleted. Only a few dollars spent on sanitation. Wm. Robinson, Town Clerk, Cannington.

CANONTO, N., Tp.—See Palmerston and N. and S. Canonto Tps.

CANONTO, S., Tp.—See Palmerston and N. and S. Canonto Tps.

CARADOC, Tp.—Grain chopping business started. Good openings for canning

factory and other industries. Number of buildings erected 6; cost about \$5,000. Amount expended on permanent improvements \$5,000. Amount expended on sanitation about \$45. C. H. Lockwood, Township Clerk, Mt. Brydges.

CARDEN, Tp.—Number of buildings erected 3; cost about \$3,000. Amount expended on permanent improvements \$420. John Walsh, Township Clerk, Kirkfield.

CARDIFF, Tp.—Good openings for woodenware industries, with waterpower available. One new building erected; cost \$800. Amount expended on permanent improvements \$173. Alfred G. Tate, Township Clerk, Highland Grove.

CARDINAL, V.—Number of buildings erected 3; cost \$3,000. Amount expended on permanent improvements \$1,321. M. Kavanagh, Village Clerk, Cardinal.

CARDWELL, Tp.—No new buildings erected. Amount expended on permanent improvements \$372, besides statute labour. M. Wilson, Township Clerk, Rosseau.

CARLETON PLACE, Tn.—Good openings for industries. Number of buildings erected 5; cost about \$17,000. Amount expended on permanent improvements, \$3,169. A. R. G. Pedan, Town Clerk, Carleton Place.

CARLING, Tp.—No new buildings erected. Amount expended on permanent improvements about \$250. J. B. Broughton, Township Clerk, Parry Sound.

CARLOW, Tp.—Good openings for iron and corundum mining, for wood-working industries and for boot and shoe factory. Number of buildings erected 2; cost \$2,500. Amount expended on permanent improvements \$900. Amount expended on sanitation \$100. J. E. Greaves, Township Clerk, Fort Stewart.

CARNARVON, Tp.—One new building erected; cost \$2,000. Amount expended on permanent improvements \$2,000. Wm. Vincier, Township Clerk, Mindemoya.

CARRICK, Tp.—Good opening for furniture factory, &c. Number of buildings erected 22; cost about \$25,000. Amount expended on permanent improvements \$400. Amount expended on sanitation \$50. J. A. Johnston, Township Clerk, Mildmay.

CARTWRIGHT, Tp.—Number of buildings erected 9; cost \$13,400. Amount expended on permanent improvements \$921. Amount expended on sanitation \$26. Wm. Beacock, Township Clerk, Caesarea.

CASEY, Tp.—Good opening for custom sawmill. No new buildings erected. Amount expended on permanent improvements \$2,150. Hugh Keats, Township Clerk, Judge.

CASHEL, Tp.—See Tudor and Cashel Tps.

CASSELMAN, V.—Number of buildings erected 10; cost about \$5,000. Amount expended on permanent improvements \$431. Amount expended on sanitation \$33. Joseph Martin, Village Clerk, Casselman.

CASSIMER, JENNINGS AND APPELBY, Tps.—One new building erected; cost \$700. Amount expended on permanent improvements \$1,910. Joseph Levert, Township Clerk, St. Charles.

CAVAN, Tp.—Good opening for cheese factory. Number of buildings erected 9; cost \$5,300. Amount expended on permanent improvements \$5,865. J. J. Fair, Township Clerk, Millbrook.

CAVENDISH, Tp.—See Galway and Cavendish Tps.

CAYUGA, V.—One new building erected; cost \$6,000. J. W. Sheppard, Village Clerk, Cayuga.

CAYUGA, N., Tp.—Number of buildings erected 3; cost \$3,000. Amount expended on permanent improvements \$2,071. Wm. Teasdale, Township Clerk, Cayuga.

CAYUGA, S., Tp.—One new building erected; cost about \$2,000. Amount expended on permanent improvements \$300. Jas. W. Caughell, Township Clerk, South Cayuga.

CHAFFEY, Tp.—Number of buildings erected 3; cost \$1,000. Amount expended on permanent improvements \$1,192. Uriah Hardy, Township Clerk, Huntsville.

CHAMBERLAIN, Tp.—Sawmill started. Good openings for pulp mill and for brickyard. Number of buildings erected 15; cost about \$3,500. Amount expended on permanent improvements about \$600. W. L. W. Wemyss, Township Clerk, Englehart.

CHANDOS, Tp.—Good hydro-electric power for industries. Amount spent on permanent improvements, \$100 by government. Anson Andras, Township Clerk, Coe Hill.

CHAPLEAU, Tp.—Owns and operates waterworks; cost \$33,000. Number of buildings erected 9; cost \$35,000. Amount expended on permanent improvements \$200. T. J. Godfrey, Township Clerk, Chapleau.

CHAPMAN, Tp.—Good openings for planing mill, tannery or grist mill, with power available. Number of buildings erected 2; \$40,000 by Dominion and Provincial Governments. Amount expended on permanent improvements \$800. Harry Q. Snuggs, Township Clerk, Magnetawan.

CHAPPLE, Tp.—Good openings for flour mill, box factory or lath mill. Number of buildings erected 8; cost \$1,500. Amount expended on permanent improvements \$5,109. Amount expended on sanitation \$166. Everett Kernahan, Township Clerk, Barwick.

CHARLOTTENBURG, Tp.—Amount expended on permanent improvements \$4,665. Amount expended on sanitation \$37. Geo. H. Macgillivray, Township Clerk, Macgillivray Bridge.

CHARLOTTEVILLE, Tp.—Good openings for various industries, with water-power and natural gas. No new buildings, only repairs. Amount expended on permanent improvements \$2,200. Amount expended on sanitation \$6. R. W. McCall, Township Clerk, Vittoria.

CHATHAM, C.—Pant and shirt factory, tap factory and harvester factory started. Owns and operates waterworks; cost \$216,551; street lighting plant; cost \$200,000. Good openings for glass factory, malleable iron plant, automobile factory, buggy and auto body factory, beet sugar factory, harness factory, furniture factory and roofing factory. Number of buildings erected 50; cost \$65,224. Amount expended on permanent improvements about \$25,000. Amount expended on sanitation about \$2,000. Arthur J. Dunn, City Clerk, Chatham.

CHATSWORTH, V.—No new buildings erected. Amount expended on permanent improvements \$100. Amount expended on sanitation \$6. W. G. Reilly, Village Clerk, Chatsworth.

CHELMSFORD, Tn.—Door and sash factory started. Good openings for wood-ware industries, shoe factory or industries requiring female help. Number of buildings erected 4; cost \$3,000. Amount expended on permanent improvements \$500. H. J. Gratton, Town Clerk, Chelmsford.

CHESLEY, Tn.—Owns and operates waterworks; cost \$10,230. Good opening for bedstead factory now available. Number of buildings erected 2; cost \$3,000. Amount expended on permanent improvements \$8,163. Amount expended on sanitation \$3,000. Wm. McDonald, Town Clerk, Chesley.

CHESTERVILLE, V.—Good opening for sash and door factory, &c. Number of buildings erected 3; cost \$15,000. Amount expended on sanitation about \$600. T. T. Shaw, Village Clerk, Chesterville.

CHINGUACOUSY, Tp.—Owns and operates telephone system; cost \$27,000. Number of buildings erected 7; cost \$11,100. Amount expended on permanent improvements about \$15,000. Robert Kee, Township Clerk, Cheltenham.

CHIPPAWA, V.—Carborundum factory started. Good openings for various industries, with electric power and good shipping by rail and water. Number of buildings erected 6; cost about \$9,000. Amount expended on permanent improvements about \$1,800. Wm. A. Myer, Village Clerk, Chippawa.

CLARA, Tp.—See Head, Maria and Clara Tps.

CHRISTIE, Tp.—Good openings for industries requiring hard or soft timber. Number of buildings erected 3; cost about \$2,000. Amount expended on permanent improvements \$164. Wells Thompson, Township Clerk, Orrville.

CLARENCE, Tp.—New brickyard started. Buildings erected 12 to 15; cost about \$25,000 to \$30,000. Amount expended on permanent improvements \$2,560. Amount expended on sanitation \$800 to \$1,000. J. A. Menard, Township Clerk, Bourget.

CLARENDON AND MILLER, Tps.—Number of buildings erected 2; cost \$700. Amount expended on permanent improvements \$100. J. F. Card, Township Clerk, Plevna.

CLARKE Tp.—Good opening for canning factory. Number of buildings erected 9; cost about \$8,800. Amount expended on permanent improvements \$3,625. Amount expended on sanitation \$148. John Rickaby, Township Clerk, Orono.

CLIFFORD, V.—Owns and operates acetylene gas plant; cost about \$3,000. Good openings for any light industry. Number of buildings erected 2; cost about \$5,000. Amount expended on permanent improvement about \$500. J. R. Aitcheson, Village Clerk, Clifford.

CLINTON, Tn.—Owns and operates waterworks; cost \$59,000. Good openings for implement factories or other iron or wood-working establishments. Number of buildings erected 2; cost \$2,500. Amount expended on permanent improvements \$4,783. D. L. Macpherson, Town Clerk, Clinton.

CLINTON, Tp.—Number of buildings erected 9; cost \$17,400. Amount expended on permanent improvements \$4,000. G. W. Tinlin, Township Clerk, Beamsville.

COBALT, Tn.—Foundry started. Owns and operates waterworks; cost \$100,000. Good opening for smelter. Number of buildings erected about 45; cost about \$150,000. Amount expended on permanent improvements \$70,000. Amount expended on sanitation \$20,000. R. L. O'Gorman, Town Clerk, Cobalt.

COBDEN, V.—Good openings for flour mill, brick and farm tile works, and repair shop. Number of buildings erected 3; cost about \$2,000. Amount expended on permanent improvements \$290. Joseph R. Warren, Village Clerk, Cobden.

COBOURG, Tn.—Good opening for some sort of steel manufacturing to work in with present Provincial plant. Number of buildings erected 34; cost about \$107,200. Amount expended on permanent improvements \$4,800. Amount expended on sanitation \$2,200. D. H. Minaker, Town Clerk, Cobourg.

COCKBURN ISLAND, Tp.—Good opening for brick and cement works, lime and builders' stone and wood industries. No new buildings erected. Amount expended on permanent improvements \$600. D. J. McLeod, Township Clerk, Cockburn Island.

COCHRANE, Tn.—New sawmill started. Public utilities being installed. Number of buildings erected about 55; cost about \$67,000. Amount expended on permanent improvements \$25,000. S. L. Bradley, Town Clerk, Cochrane.

COLBORNE, Tp.—Good openings for planing and shingle mills and for shoemaker. Number of buildings erected 6; cost \$4,000. Amount expended on permanent improvements \$2,000. F. W. McDonagh, Township Clerk, Carlow.

COLBORNE, V.—Openings for various industries. Number of buildings erected 2; cost about \$6,000. Amount expended on permanent improvements \$1,920. Geo. Keyes, Village Clerk, Colborne.

COLCHESTER, N., Tp.—Owns and operates telephone system; cost \$8,415. Good openings for brick and tile yard, excelsior factory, and blacksmith shop. Number of buildings erected 10; cost about \$8,000. Amount expended on permanent improvements \$16,712, including drainage. L. C. Hillis, Township Clerk, Gesto.

COLCHESTER, S., Tp.—Good opening for canning factory. Number of buildings erected about 50; cost about \$50,000. Amount expended on permanent improvements \$2,054. Amount expended on sanitation \$24. J. H. Madill, Township Clerk, Harrow.

COLDWATER, V.—Owns and operates waterworks; cost \$23,000. One building erected; cost \$15,000. Amount expended on permanent improvements \$111. J. R. Russell, Village Clerk, Coldwater.

COLEMAN, Tp.—Amount expended on permanent improvements \$33,109. Amount expended on sanitation \$1,330. P. J. Hart, Township Clerk, Cobalt.

COLLINGWOOD, Tn.—Woodworking industry started. Owns and operates waterworks and electric light plant; cost \$107,338. Good opening for woodworking industries. Number of buildings erected about 40; cost about \$50,000. Amount expended on permanent improvements about \$16,000. Amount expended on sanitation about \$12,000. J. H. Duncan, Town Clerk, Collingwood.

COLLINGWOOD, Tp.—Good openings for fruit and vegetable canning works. Number of buildings erected 15; cost \$12,900. Edw. Rorke, Township Clerk, Clarksburg.

COPPER CLIFF, Tn.—Number of buildings erected 17; cost \$32,000. Amount expended on permanent improvements \$656. Amount expended on sanitation \$461. Thos. Stoddard, Town Clerk, Copper Cliff.

CORNWALL, Tn.—Owns and operates waterworks; cost \$140,564. Good openings for almost any kind of industry, with excellent shipping facilities by land or water. Number of buildings erected about 9; cost about \$45,000. Amount expended on permanent improvements \$7,649. Amount expended on sanitation \$1,219. George S. Jarvis, Town Clerk, Cornwall.

CORNWALL, Tp.—Good opening for cement works, canning factory, and agricultural implement factory. Number of buildings erected 12; cost \$17,000. Amount expended on permanent improvements \$11,000. Amount expended on sanitation \$200. John Mullin, Township Clerk, Cornwall Centre.

COURTRIGHT, V.—Good openings for almost any kind of industry. No new buildings. Amount expended on permanent improvements \$662. R. G. Hewart, Village Clerk, Courtright.

CRAMAHE, Tp.—One building erected; cost \$7,000. Amount expended on permanent improvements \$5,230. Amount expended on sanitation \$26. C. A. Wilson, Township Clerk, Castleton.

CREEMORE, V.—Owns and operates waterworks; cost \$23,000. Good opening for woollen mill. Number of buildings erected 2; cost \$3,000. Amount expended

on permanent improvements \$800. Amount expended on sanitation \$25. A. H. Watson, Village Clerk, Creemore.

CROSBY, N., Tp.—Number of buildings erected 4; cost \$3,500. Amount expended on permanent improvements \$353. Amount expended on sanitation \$20. Wm. McKnight, Township Clerk, Westport.

CROWLAND, Tp.—Good openings for industries requiring electric power, natural gas and transport by rail and canal. Number of buildings erected about 16; cost about \$40,000. Amount expended on permanent improvements \$1,400. H. L. Pratt, Township Clerk, Welland.

CULROSS, Tp.—Number of buildings erected 15; cost \$16,250. Amount expended on permanent improvements \$2,000 to \$2,250, besides statute labour. Amount expended on sanitation, Board of Health, a few dollars. Chas. Button, Township Clerk, Teeswater.

CUMBERLAND, Tp.—Good opening for general foundry. Number of buildings erected 23; cost \$10,300. Amount expended on permanent improvements \$900. H. H. Dunning, Township Clerk, Cumberland.

DACK, Tp.—Good opening for pulp mill. Number of buildings erected 15; cost \$7,000. Amount expended on permanent improvements \$1,690. Amount expended on sanitation \$234. J. K. Dugan, Township Clerk, Charlton.

DALHOUSIE AND SHERBROOKE, N., Tps.—Good opening for any industry using hardwood; excellent water power sites on Mississippi suitable for electric power. Number of buildings erected 3; cost about \$2,000. Amount expended on permanent improvements \$721. Walter Geddes, Township Clerk, Dalhousie Lake.

DALTON, Tp.—Number of buildings erected 1; cost about \$1,400. Amount expended on permanent improvements \$100. Alex. Montgomery, Township Clerk, Sebright.

DARLING Tp. —Marble quarry and works started. Good openings for mining. Number of buildings erected 2; cost \$500. Amount expended on permanent improvements \$200. Jas. H. Rintoul, Township Clerk, Tatlock.

DARLINGTON, Tp.—No new buildings erected. Amount expended on permanent improvements \$3,457. Amount expended on sanitation \$43. H. Elliott, Township Clerk, Hampton.

DAWN, Tp.—Number of buildings erected 4; cost \$5,100. Amount expended on permanent improvements \$20,000. Amount expended on sanitation \$475. J. M. Webster, Township Clerk, Rutherford.

DAY AND BRIGHT ADDITIONAL, Tps.—Good opening for cheese factory. One new building erected; cost \$500. Amount expended on permanent improvements \$200. Chas. Cavanagh, Township Clerk, Sowerby.

DELAWARE, Tp.—Sawmill and lumber yard started. Good openings for canning factory, tin shop, sanitarium, bank and radial lines. Number of buildings erected 8; cost \$10,000. Amount expended on permanent improvements \$1,800. J. H. Matthews, Township Clerk, Delaware.

DELHI, V. Good openings for industries desiring electric power, natural gas, railway facilities and municipal encouragement. Number of buildings erected 4; cost \$2,250. Amount expended on permanent improvements \$1,092. Amount expended on sanitation \$263. Roger Crysler, Village Clerk, Delhi.

DENBIGH, ABINGER AND ASHBY Tps.—New cheese factory started. Good opening for shoemaker. Number of buildings erected 5; cost \$1,200. Amount expended on permanent improvements \$215. Amount expended on sanitation \$149. Paul Stein, Township Clerk, Denbigh.

DENISON, Tp.—See Drury, Denison and Graham Tps.

DERBY, Tp.—Amount expended on permanent improvements \$3,991. Amount expended on sanitation \$124. Wm. Beaton, Township Clerk, Owen Sound.

DEREHAM, Tp.—Good opening for brick and tile yard. Amount expended on permanent improvements \$21,700 besides about 6,000 days statute labour and including about \$13,000 for main drains. Alex. Bell, Township Clerk, Verschoyle.

DESERONTO, Tn.—Match factory started. Owns and operates waterworks, value \$48,310; gas works, value \$19,000. Good openings for any sort of industry with electric power, railways and magnificent water front. Addition built to match factory costing about \$2,500. Amount expended on permanent improvements \$490. Amount expended on sanitation \$975. Henry R. Bedford, Town Clerk, Deseronto.

DIGBY, Tp.—See Laxton, Digby and Longford Tps.

DILKE, Tp.—Good opening for harness shop, implement agency, etc. Number of buildings erected 2; cost \$1,100. Amount expended on permanent improvements \$1,671. Frank Longmore, Township Clerk, Pinewood.

DORCHESTER, N., Tp.—Good openings for milk condensing factory, canning factory and hardware factory. Amount expended on permanent improvements \$3,176. W. B. Lang, Township Clerk, Dorchester.

DOURO, Tp.—Number of buildings erected 6; cost \$5,500. Amount expended on permanent improvements \$1,500. John J. Allen, Township Clerk, Douro.

DOVER, Tp.—Good opening for tobacco factory. Number of buildings erected 23; cost \$20,600. Amount expended on permanent improvements about \$10,000. Amount expended on sanitation \$500. John Welsh, Township Clerk, Chatham.

DOWNIE, Tp.—Number of buildings erected 12; cost \$18,000. Amount expended on permanent improvements \$4,500, including government grant. Amount expended on sanitation \$275. P. Smith, Township Clerk, Stratford.

DRAPER, Tp.—Good openings for sawmill by electric or water power. No new buildings erected. Amount expended on permanent improvements \$700. D. Cairns, Township Clerk, Uffington.

DRAYTON, V.—Good openings for flax mill, brick yard and pottery. Number of buildings erected 7; cost \$6,000. Amount expended on permanent improvements \$688. Amount expended on sanitation \$80. A. C. Woodman, Village Clerk, Drayton.

DRESDEN, Tn.—Owns and operates electric light plant, value \$14,500. Openings for any kind of industry. No new buildings erected. Amount expended on permanent improvements \$2,538. Amount expended on sanitation \$247. J. F. Bridgewater, Town Clerk, Dresden.

DRUMMOND, Tp.—Number of buildings erected about 30; value about \$6,000. Amount expended on permanent improvements \$1,162. Amount expended on sanitation \$27. E. R. Stedman, Township Clerk, Richardson.

DRURY, DENISON AND GRAHAM, Tps.—Owns and operates street light system; cost \$226. Current supplied free by Mond Nickel Co. One building erected; cost \$850. Amount expended on permanent improvements \$3,348. Amount expended on sanitation \$553. R. B. Colloton, Township Clerk, Victoria Mines.

DRYDEN, Tn.—Good opening for grist mill, box factory or any industry requiring wood; good water power. Number of buildings erected 6; cost \$6,500. Amount expended on permanent improvements \$394. Amount expended on sanitation \$39. A. L. Orvis, Town Clerk, Dryden.

DUDLEY, Tp.—See Dysart, etc., Tps.

DUMFRIES, N., Tp.—Number of buildings erected 4; cost about \$4,000. Amount expended on permanent improvements \$5,246. Jos. Wrigley, Township Clerk, Ayr.

DUMFRIES, S., Tp.—Number of buildings erected 9; cost \$16,000. Amount expended on permanent improvements \$3,500. Amount expended on sanitation \$165. Wm. Fleming, Township Clerk, Glenmorris.

DUMMER, Tp.—Amount expended on permanent improvements \$864, of which \$572 was by Ontario Government. Amount expended on sanitation \$11. Rich. Deen, Township Clerk, Warsaw.

DUNDALK, V.—New planing mill started. Owns and operates electric light plant; cost \$8,000. Good openings for furniture factory and woollen mills. Number of buildings erected 2; cost \$3,600. Amount expended on permanent improvements \$500. M. W. Ridley, Village Clerk, Dundalk.

DUNDAS, Tn.—Factory for gasoline traction engines started. Owns and operates waterworks; cost \$65,000; electric light and power plant under construction. cost to date \$12,000. Good openings for almost any industries; distributing point of hydro-electric system and other advantages. Number of buildings erected 6; cost \$30,000. Amount expended on permanent improvements \$3,553. Amount expended on sanitation \$1,093. John S. Fry, Town Clerk, Dundas.

DUNN, Tp.—Good openings for lime and brick kilns. Number of buildings erected 2; cost \$3,000. Amount expended on permanent improvements \$100. David Lyons, Township Clerk, Dunn.

DUNNVILLE, Tn.—Additions were made to knitting mill, hammock factory, gas and gasoline engine factory and machine shop. Owns and operates waterworks; cost \$31,000. Good sites for iron works and harbour and other shipping facilities. Number of buildings erected 21; cost \$89,950. Amount expended on permanent improvements about \$3,000. Amount expended on sewers in construction \$37,000. J. W. Holmes, Town Clerk, Dunnville.

DUNWICH, Tp.—Number of buildings erected 8; cost \$10,000. Amount expended on permanent improvements about \$3,000. D. A. McNabb, Township Clerk, Dutton.

DURHAM, Tn.—Good opening for almost any kind of industry. Number of buildings erected 4; cost about \$4,000. Amount expended on permanent improvements about \$1,500. Wm. B. Vollet, Town Clerk, Durham.

DUTTON, V.—Good openings for canning factory and basket factory. Number of buildings erected 2; cost \$3,000. Amount expended on permanent improvements \$800. J. D. Blue, Village Clerk, Dutton.

DYMOND, Tp.—New flour mill started. Number of buildings erected 6; cost \$5,000. Amount expended on permanent improvements \$3,151. E. F. Stephenson, Township Clerk, New Liskeard.

DYSART, Etc., Tps.—Good openings for sawmill, shingle mill, stave factory, chemical works, furniture factory, etc. Number of buildings erected 25; cost about \$15,000. Amount expended on permanent improvements \$1,200. G. H. Potts, Township Clerk, Haliburton.

EASTHOPE, N., Tp.—Municipal telephone started. Owns and operates telephone system; cost \$20,000. Number of buildings erected 5; cost about \$5,000. Amount expended on permanent improvements \$24,000, including \$20,000 on municipal telephone system. J. D. Fisher, Township Clerk, Amulree.

EASTHOPE, S., Tp.—Good opening for brick and tile yard. One new building erected; cost about \$4,750. Amount expended on permanent improvements \$1,475. V. Stock, Township Clerk, Tavistock.

EASTNOR, Tp.—Good opening for brick and tile yard. Number of buildings erected 4; cost about \$2,000. Amount expended on permanent improvements \$2,025. Amount expended on sanitation \$80. Wm. Laidlaw, Township Clerk, Lion's Head.

EASTVIEW, V.—Grain elevator, and feed mills started. Good openings for various industries. Number of buildings erected about 75; cost about \$60,000. Amount expended on permanent improvements \$1,900. H. R. Washington, Village Clerk, Cummings Bridge.

EFFINGHAM, Tp.—See Kaladar, Anglesea and Effingham Tps.

EGANVILLE, V.—Good openings for various industries, with waterpower available. No new buildings erected. Amount expended on permanent improvements \$2,010. Amount expended on sanitation \$120. Jas. R. Campbell, Village Clerk, Eganville.

EGREMONT, Tp.—Good opening for harness maker. Number of buildings erected 7; cost about \$11,200. Amount expended on permanent improvements \$3,624. Amount expended on sanitation \$36. David Allan, Township Clerk, Holstein.

EKFRID, Tp.—Good openings for carriage factory and bakery. Number of buildings erected 7; cost \$12,000. Amount expended on permanent improvements \$1,850. A. P. McDougald, Township Clerk, Melbourne.

ELDERSLIE, Tp.—Number of buildings erected 10; cost about \$18,000. Amount expended on permanent improvements \$2,884. Amount expended on sanitation \$69. R. C. Pearse, Township Clerk, Paisley.

ELDON, Tp.—Good opening for industries requiring marl or peat. Number of buildings erected 15; cost about \$12,500. Amount expended on permanent improvements \$3,000. B. Stacey, Township Clerk, Lorneville.

ELIZABETHTOWN, Tp.—New cheese factory started. Amount expended on permanent improvements \$4,456. J. B. Barry, Township Clerk, New Dublin.

ELLICE, Tp.—Cider mill and apple butter factory started. Good openings for harness maker and shoe maker. Number of buildings erected 18; cost about \$21,450. Amount expended on permanent improvements \$3,267. Amount expended on sanitation \$184. Justus Kreuter, Township Clerk, Rostock.

ELMA, Tp.—Blacksmith and carriage shop started. Good openings for sash and door factory and condensed milk factory. Number of buildings erected 8; cost \$12,000. Amount expended on permanent improvements \$3,200. Geo. Lochhead, Township Clerk, Atwood.

ELMIRA, V.—Felt footwear factory started. Owns and operates waterworks; cost \$30,000. Good openings for shoe factory, button factory and other industries. Number of buildings erected 23; cost \$35,000. Amount expended on permanent improvements \$1,700. J. H. Ruppel, Village Clerk, Elmira.

ELMSLEY, N., Tp.—Good openings for stave factory and cheese box factory. Number of buildings erected 8; cost about \$1,000. Amount expended on permanent improvements \$300. Amount expended on sanitation \$20. Robt. M. Imeson, Township Clerk, Perth.

ELMSLEY, S., Tp.—Good opening for bakery. Number of buildings erected 8; cost about \$3,000. Amount expended on permanent improvements \$1,621, including \$1,415 by county on bridges. John Rabb, Township Clerk, Lombardy.

ELORA, V.—Furniture factory started. No new buildings erected. Amount expended on permanent improvements \$860. Henry Clarke, Village Clerk, Elora.

ELZEVR AND GRIMSTHORP, Tps.—Good water power for electric machinery

for industries. Number of buildings erected 3; cost \$1,500. Amount expended on permanent improvements \$1,600. W. J. Rhodes, Township Clerk, Queensboro.

EMBRO, V.—Good openings for tile work, machine shop and laundry. One new building erected; cost \$1,000. Amount expended on permanent improvements \$733. E. J. Cody, Village Clerk, Embro.

EMILY, Tp.—Number of new buildings erected about 20; cost about \$10,000. Amount expended on permanent improvements \$2,311. Rich. J. Grandy, Township Clerk, Omemee.

EMO, Tp.—Two fruit and confectionery plants started. Good openings for printing office, bank, etc. School buildings erected; cost \$4,000. Amount expended on permanent improvements \$4,070. B. L. Phillips, Township Clerk, Emo.

ENGLEHART, Tn.—Good openings for pulp mill, brick yard, cement block factory, etc. Number of buildings erected 3; cost \$5,000. Amount expended on permanent improvements \$855. Amount expended on sanitation \$270. J. Hamlden Field, Town Clerk, Englehart.

ENNISKILLEN, Tp.—Good openings for beet sugar factory. Amount expended on permanent improvements about \$6,500. Amount expended on sanitation \$62. Geo. V. Wyant, Township Clerk, Petrolea.

ENNISMORE, Tp.—New butter factory started. Good opening for bakery and butchers. Number of buildings erected 70; cost about \$10,000. Amount expended on permanent improvements \$10,000. Amount expended on sanitation \$200. John Moloney, Township Clerk, Ennismore.

ERAMOSA, Tp.—Number of buildings erected about 25; cost about \$25,000. Amount expended on permanent improvements \$810. Amount expended on sanitation \$132. W. M. Head, Township Clerk, Guelph.

ERIN, Tp.—Number of buildings erected 3; cost \$3,000. Amount expended on permanent improvements \$2,403, not including statute labour. Amount expended on sanitation \$83. Thos Young, Township Clerk, Erin.

ERIN, V.—Vacant woollen mill with water power available. Number of buildings erected 2; cost about \$5,000. Amount expended on permanent improvements about \$1,000. Wm. Conboy, Village Clerk, Erin.

ERNESTOWN, Tp.—Number of buildings erected 3; cost \$2,000. Amount expended on permanent improvements \$3,928. Amount expended on sanitation \$60. E. O. Clark, Township Clerk, Odessa.

ESCOTT, FRONT, Tp.—Number of buildings erected 4; cost about \$1,100. Amount expended on permanent improvements \$1,879. Amount expended on sanitation \$14. F. F. Hutchison, Township Clerk, Escott.

ESQUESING, Tp.—Good openings for cannery and cheese and butter factory. Number of buildings erected about 9; cost about \$25,000. Amount expended on permanent improvements \$3,000. J. A. Tracy, Township Clerk, Esquesing.

ESSA, Tp.—Portable sawmill started. Number of buildings erected 9; cost \$8,000. Amount expended on permanent improvements \$7,500. Amount expended on sanitation \$100. John Coxworth, Township Clerk, Ivy.

ESSEX, Tn.—Cement block factory started. Owns and operates waterworks; cost about \$34,000. Good opening for brick and tile yard. Number of buildings erected 11; cost about \$9,600. Amount expended on permanent improvements \$250. Amount expended on sanitation \$1,500. Geo. E. Wightman, Town Clerk, Essex.

ETOBICOKE, Tp.—Planing mill started. Good opening for factories requiring electric power. Number of buildings erected about 48; cost about \$90,000.

Amount expended on permanent improvements \$3,800. Amount expended on sanitation \$760. J. A. L. Macpherson, Township Clerk, Islington.

EUPHEMIA, Tp.—Blacksmith's shop started. Number of buildings erected 6; cost about \$2,000. Amount expended on permanent improvements \$670. D. M. Smith, Township Clerk, Cairo.

EUPHRASIA, Tp.—Number of buildings erected about 10; cost about \$5,000. Amount expended on permanent improvements \$3,200. N. L. Curry, Township Clerk, Rocklyn.

EXETER, V.—Owns and operates waterworks for fire protection; cost \$22,000. Good openings for knitting mill, woollen mill, etc. Number of buildings erected 2; cost \$3,000. T. B. Carling, Village Clerk, Exeter.

EYRE, Tp.—See Dysart, etc., Tps.

FARADAY, Tp.—No new buildings erected. Amount expended on permanent improvements \$500. Walter Higgins, Township Clerk, Bancroft.

FENELON, Tp.—Number of buildings erected 4; cost \$2,500. Amount expended on permanent improvements \$1,620. John B. Powles, Township Clerk, Powles Corner.

FENELON FALLS, V.—Owns and operates electric light plant; cost \$50,000. Good openings for almost any kind of industry. Number of buildings erected 5; cost \$25,500. Amount expended on permanent improvements \$1,000. E. Fitzgerald, Village Clerk, Fenelon Falls.

FERGUS, V.—Good openings for agricultural implement works, canning factory, furniture factory, etc. Number of buildings erected about 4; cost about \$8,000. Amount expended on permanent improvements \$3,000. James Beattie, Village Clerk, Fergus.

FERRIS, Tp.—Openings for various industries, with good water power. Number of buildings erected about 10; cost about \$2,000. Amount expended on permanent improvements \$1,030. Amount expended on sanitation \$107. S. Moreau, Township Clerk, Corbeil.

FINCH, V.—Good opening for carriage works and other small factories. No new buildings erected. Amount expended on permanent improvements \$200. Jas. R. Simpson, Village Clerk, Finch.

FITZROY, Tp.—Good openings for various industries. Number of buildings erected about 16; cost about \$8,000. Amount expended on permanent improvements about \$3,500. A. Murphy, Township Clerk, Antrim.

FLAMBOROUGH, E., Tp.—Fire-proofing factory started. Number of buildings erected 13; cost \$18,700. Amount expended on permanent improvements \$1,200. Amount expended on sanitation \$200. Geo. Church, Township Clerk, Carlisle.

FLAMBOROUGH, W., Tp.—Number of buildings erected about 9; cost about \$18,500. Amount expended on permanent improvements about \$2,300. Amount expended on sanitation about \$300. Ira N. Binkley, Township Clerk, Greenville.

FLOS, Tp.—Brick and tile yard started. Good openings for cement works and foundry. Number of buildings erected 4; cost \$6,000. Amount expended on permanent improvement \$1,400. C. S. Burton, Township Clerk, Elmvale.

FOREST, Tn.—Good openings for canning factory and pickle factory. Number of buildings erected 4; cost about \$3,800. Amount expended on permanent improvements \$1,860. Amount expended on sanitation \$60. Rich. Karr, Town Clerk, Forest.

FORT ERIE, V.—Owns and operates waterworks, cost about \$52,000; electric light plant, cost about \$4,000. Good opening for various industries with electric

power and natural gas. Number of buildings erected 30; cost about \$40,000. Amount expended on permanent improvements about \$4,000. B. F. Matthews, Village Clerk, Fort Erie.

FORT FRANCES, Tn.—Lumber and sawmill started. Owns and operates waterworks, cost \$66,845; electric light system \$10,000. Good openings for lumber mill, furniture factory, etc. Number of buildings erected 6; cost about \$11,000. Amount expended on permanent improvements \$1,318. Amount expended on sanitation \$7,339. G. W. Walker, Town Clerk, Fort Frances.

FORT WILLIAM, C.—Patent briquettes factory, foundry and hardwood floor and panelling factory started. Owns and operates waterworks, cost \$816,931; electric light plant, cost \$187,324; telephone system, cost \$174,000; street railway, cost \$372,500. Good openings for heavy iron industries, metal working factories, flour mills, cereal product factories, clothing factories, woodwork factories, etc. Number of buildings erected 700; cost \$2,700,000. Amount expended on permanent improvements \$136,504. Amount expended on sanitation \$193,977, including \$147,720 for sewers and connections. A. McNaughton, City Clerk, Fort William.

FRASER, Tp.—See Alice and Fraser Tps.

FREDERICKSBURGH, S., Tp.—Number of buildings erected 8; cost \$3,100. Amount expended on permanent improvements \$504. Wm. H. Rikely, Township Clerk, Hayburn.

GAINSBOROUGH, Tp.—Amount expended on permanent improvements \$3,500. S. Kennedy, Township Clerk, St. Ann's.

GALT, Tn.—Shoe factory, foundry, automobile factory, sash and door factory and motor repair shop started. Owns and operates waterworks, cost \$211,667; electrical light and power plant, cost \$66,000. Good openings for iron works, woollen factory, shoe factory, etc., with factory sites available. Number of buildings erected about 75; cost about \$100,000. Amount expended on permanent improvements \$7,500. Amount expended on sanitation \$17,525. Joseph McCartney, Town Clerk, Galt.

GALWAY AND CAVENDISH, Tp.—One new building erected, cost \$500. Amount expended on permanent improvements about \$500. Patrick Collins, Township Clerk, Mount Irwin.

GANANOQUE, Tn.—Owns and operates waterworks; cost about \$150,000. Good opening for industries requiring water power and shipping facilities. Number of buildings erected 4; cost \$30,000. Amount expended on permanent improvements \$2,354. Amount expended on sanitation \$500. S. McCammon, Town Clerk, Gananoque.

GARAFRANA, E., Tp.—Number of buildings erected 5; cost \$7,000. Amount expended on permanent improvements about \$3,700. Amount expended on sanitation \$27. John Preston, Township Clerk, Marsville.

GARAFRANA, W., Tp.—Number of buildings erected about 10; cost about \$10,000. Amount expended on permanent improvements \$3,586. Amount expended on sanitation \$94. Thos. Goodall, Township Clerk, Belwood.

GARDEN ISLAND, V.—No new buildings erected. Amount expended on permanent improvements \$232. Thos. Lappen, Village Clerk, 323 Earl St., Kingston.

GARSON, Tp.—See Neelon and Garson Tps.

GEORGETOWN, V.—Coating paper factory and knitting factory started. Good openings for woollen and knitted goods factories, foundry, furniture factory, etc. Number of buildings erected 17; cost \$75,000. Amount expended on permanent

improvements \$974. Amount expended on sanitation \$90. H. U. Kennedy, Village Clerk, Georgetown.

GEORGINA, Tp.—Number of buildings erected 3; cost \$2,000. Amount expended on permanent improvements \$1,579. Donald Ego, Township Clerk, Virginia.

GLAMORGAN, Tp.—Good opening for woollen mill and furniture factory. Number of buildings erected about 12; cost about \$6,000. Amount expended on permanent improvements \$3,900, including Government grant and statute labour. D. Williams, Township Clerk, Gooderham.

GLANFORD, Tp.—Number of buildings erected about 8; cost about \$15,000. Amount expended on permanent improvements \$1,040. Daniel Reed, Township Clerk, Glanford.

GLENCOE, V.—Owns and operates electric light plant; cost \$15,000. One building erected; cost \$1,200. Amount expended on permanent improvements \$110. Amount expended on sanitation \$173. Geo. Wilson, Village Clerk, Glencoe.

GLENELG, Tp.—Sawmill started. Good opening for sawmill. Number of buildings erected 6; cost about \$7,500. Amount expended on permanent improvements \$3,291. Amount expended on sanitation \$40. J. S. Black, Township Clerk, Pomona.

GLOUCESTER, Tp.—Number of buildings erected about 200; cost about \$100,000. Amount expended on permanent improvements \$10,000, half by county. Amount expended on sanitation about \$5,000. H. B. Billings, Township Clerk, Billings Bridge.

GODERICH, Tn.—Sawmill and two grain elevators started. Owns and operates waterworks and electric light plant; cost \$131,674. Amount expended on sanitation \$2,517. L. L. Knox, Town Clerk, Goderich.

GODERICH, Tp.—Owns and operates municipal telephone; cost \$2,067. Number of buildings erected 5; cost \$5,400. Amount expended on permanent improvements \$3,000. N. W. Trewartha, Township Clerk, Holmesville.

GORDON, Tp.—Good opening for cheese factory or canning factory. No new buildings erected. Amount expended on permanent improvements \$1,800. John Gibson, Township Clerk, Gore Bay.

GORE BAY, Tn.—Good openings for sawmill and cement factory. Numbers of buildings erected about 5; cost about \$3,000. Amount expended on permanent improvements about \$2,000. John W. Kinney, Town Clerk, Gore Bay.

GOSFIELD, N., Tp.—Owns and operates municipal telephone system; value about \$14,625. Good openings for creamery, canning factory, pickle factory or tobacco factory. Number of buildings erected about 40; cost about \$25,400. Amount expended on permanent improvements \$11,168. Amount expended on sanitation about \$30. W. H. Noble, Township Clerk, Cottam.

GOSFIELD, S., Tp.—Number of buildings erected about 15; cost about \$10,000. Amount expended on permanent improvements \$5,586. G. W. Coatsworth, Township Clerk, Kingsville.

GOULBURN, Tp.—Number of buildings erected 10; cost \$3,250. Amount expended on permanent improvements \$1,687. Amount expended on sanitation \$28. J. A. Cummings, Township Clerk, Hazeldean.

GOWER, N., Tp.—Opening for sash and door factory. Number of buildings erected about 10; cost about \$10,100. Amount expended on permanent improvements about \$700. Jas. E. Craig, Township Clerk, North Gower.

GOWER, S., Tp.—No new buildings erected. Amount expended on permanent

improvements \$721. Amount expended on sanitation \$15. Elijah Pelton, Township Clerk, South Gower.

GRAHAM, Tp.—See Drury, Denison and Graham Tps.

GRAND VALLEY, V.—Openings for various industries. Number of buildings erected 2; cost \$2,700. Amount expended on permanent improvements \$748. Amount expended on sanitation \$17. Wm. McIntyre, Village Clerk, Grand Valley.

GRANTHAM, Tp.—Cement block factory started. Good openings for industries of all kinds. Number of buildings erected 20; cost about \$30,300. Amount expended on permanent improvements \$1,600. Amount expended on sanitation \$25. L. S. Bessey, Township Clerk, St. Catharines.

GRAVENHURST, Tn.—Factory for bank and office fittings started. Owns and operates waterworks, cost \$20,000; and power plant cost \$95,000. Opening for almost any kind of industry. One building erected cost \$2,500. W. H. Cross, Town Clerk, Gravenhurst.

GREENOCK, Tp.—Amount expended on permanent improvements \$3,753. Amount expended on sanitation \$663. Thos. H. Purdy, Township Clerk, Narva.

GREY, Tp.—Good opening for brick and tile yard and canning factory. Number of buildings erected 3; cost \$20,000. Amount expended on permanent improvements \$13,221. A. H. Macdonald, Township Clerk, Ethel.

GRIFFITH AND MATAWATCHAN, Tps.—Amount expended on permanent improvements \$49. Edw. Godin, Township Clerk, Griffith.

GRIMSBY, V.—Canning factory and additions to specialty factory started. Owns and operates waterworks; cost about \$55,000. Good openings for box factory, basket factory, foundry, etc. Number of buildings erected about 25; cost about \$117,000. Amount expended on permanent improvements \$4,000. Amount expended on sanitation about \$400. Jas. Brodin, Village Clerk, Grimsby.

GRIMSBY, N., Tp.—Good opening for jam factory. Number of buildings erected 8; cost about \$13,500. Amount expended on permanent improvements \$3,600. John Kerman, Township Clerk, Grimsby.

GRIMSBY, S., Tp.—Number of buildings erected 7; cost \$7,500. Amount expended on permanent improvements, \$1,000. F. W. Roberts, Township Clerk, Smithville.

GRIMSTHORPE, Tp.—See Elzevir and Grimsthorp Tps.

GUELPH, C.—Davey rendering works, sash and door factory, broom factory started. Owns and operates waterworks, cost \$340,265; gas and electric light and power plant, cost \$410,366; street railway, cost \$124,000, besides owning Guelph Junction Railway, operated by C. P. R., cost \$186,750. Good openings for agricultural implement factory, furniture factory, brush and broom factory, automobile factory, hardware factory, woodenware industries, etc. Number of buildings erected about 60; cost about \$150,000. Amount expended on permanent improvements \$60,225. Amount expended on sanitation \$5,456. T. J. Moore, City Clerk, Guelph.

GUELPH, Tp.—Amount expended on permanent improvements \$4,000. Jas. Laidlaw, Township Clerk, Guelph.

GUILFORD, Tp.—See Dysart, etc., Tps.

GWILLIMBURY, E., Tp.—Number of buildings erected about 10; cost about \$8,000. Amount expended on permanent improvements \$2,000. A. R. Mackenzie, Township Clerk, Queensville.

GWILLIMBURY, N., Tp.—Number of buildings erected about 12; cost about \$10,000. Amount expended on permanent improvements \$1,106. Henry Sennett, Township Clerk, Bellhaven.

GWILLIMBURY, W., Tp.—No new buildings erected. Amount expended on permanent improvements \$1,274. E. J. Evans, Township Clerk, Bradford.

HAGAR, Tp.—Number of buildings erected 4; cost \$600. Amount expended on permanent improvements \$361. Mrs. T. A. Millichamp, Township Clerk, Markstay.

HAGARTY AND RICHARDS, Tps.—Good openings for woollen and flour mills, and pulp factory. Number of buildings erected 5; cost \$3,000. Amount expended on permanent improvements \$400. Amount expended on sanitation \$455. P. J. Harrington, Township Clerk, Killaloe Station.

HAGARMAN, Tp.—Hardwood sawmill started. Number of buildings erected about 8; cost about \$2,500. Amount expended on permanent improvements about \$100, besides statute labour. F. W. McFie, Township Clerk, Dunchurch.

HAGERSVILLE, V.—Good openings for canning factory and woollen mill. Number of buildings erected 7; cost \$14,000. Amount expended on permanent improvements \$1,000. Amount expended on sanitation \$500. J. F. Scott, Village Clerk, Hagersville.

HAILEYBURY, Tn.—Owns and operates waterworks; cost \$78,996. Good opening for all kinds of woodworking industries. Number of buildings erected about 130; cost about \$225,000. Amount expended on permanent improvements \$12,555. Amount expended on sanitation \$21,792. Theo. H. Connor, Town Clerk, Haileybury.

HALDIMAND, Tp.—Good opening for canning factory. Amount expended on permanent improvements \$1,000. Amount expended on sanitation \$89. Reuben Lawless, Township Clerk, Grafton.

HALLAM, Tp.—Good opening for cheese factory. No new buildings erected. Amount expended on permanent improvements \$1,069. Jas H. Toland, Township Clerk, Webbwood.

HALLOWELL, Tp.—Number of buildings erected 5; cost \$4,500. Amount expended on permanent improvements \$1,211. E. B. Yarwood, Township Clerk, Pictou.

HAMILTON, C.—Baking powder factory, plow factory, fireproof tiling factory, agricultural shapes factory, wood turning works, machine tools factory, paper box factory, grocers' sundries, reflector factory started. Owns and operates waterworks; cost \$2,573,410. Openings for automobile factory, and various manufactures, especially metal industries. Number of buildings erected 1,162; cost \$2,539,185. Amount expended on permanent improvements \$326,418. Amount expended on sanitation \$167,821. S. H. Kent, City Clerk, Hamilton.

HAMILTON, Tp.—Number of buildings erected 3; cost \$7,000. Amount expended on permanent improvements \$5,831. Amount expended on sanitation \$85. J. D. Stewart, Township Clerk, Cobourg.

HANMER, Tp.—Good opening for butter factory. Number of buildings erected 8; cost about \$4,600. Amount expended on permanent improvements \$148. Nap. Lapage, Township Clerk, Brunetville.

HANOVER, Tn.—Upholstery works started. Owns and operates waterworks; cost \$31,000. Good openings for boot and shoe factory, piano factory, sash and door factory, iron and brass factory, textile factory, etc. Number of buildings erected about 40; cost about \$45,000. Amount expended on sanitation \$58. John Taylor, Town Clerk, Hanover.

HARBURN, Tp.—See Dysart, etc., Tps.

HARCOURT, Tp.—See Dysart, etc., Tps.

HARLEY, Tp.—Sawmill started. Number of buildings erected 6; cost \$3,600. Amount expended on permanent improvements \$3,000. Amount expended on sanitation \$12. Edgar Cragg, Township Clerk, Hanbury.

HARROW, Tp.—See Salter, May and Harrow Tps.

HARVEY, Tp.—Openings for industries requiring wood or stone. Number of buildings erected 3; cost \$3,500. Amount expended on permanent improvements \$3,800. David Weir, Township Clerk, Lakehurst.

HARWICH, Tp.—Number of buildings erected 10; cost \$8,000. Amount expended on permanent improvements \$14,000. Amount expended on sanitation \$100. Geo. W. Riseborough, Township Clerk, Blenheim.

HASTINGS, V.—Good opening for any industry. One building erected; cost \$2,000. Amount expended on permanent improvements \$1,500. A. Wilson, Village Clerk, Hastings.

HAVELOCK, Tp.—See Dysart, etc., Tps.

HAVELOCK, V.—Good opening for canning factory. Number of buildings erected 5; cost \$10,000. Amount expended on permanent improvements \$450. J. W. Bryans, Village Clerk, Havelock.

HAWKESBURY, Tn.—Mica works started. Owns and operates waterworks; cost \$110,000. Good opening for carriage factory or other industry using wood. Number of dwellings erected 7; cost \$5,000, and railway station cost \$2,100.

HAWKESBURY E., Tp.—Number of buildings erected 15; cost about \$15,000. Amount expended on permanent improvements \$6,300. Nap. Labrosse, Township Clerk, St. Eugene.

HAWKESBURY, W., Tp.—Brickyard started. Number of buildings erected 12; cost about \$15,000. Amount expended on permanent improvements about \$1,500. Amount expended on sanitation about \$175. W. I. Dunning, Township Clerk, Vankleek Hill.

HAY, Tp.—Number of buildings erected about 6; cost about \$10,000. Amount expended on permanent improvements about \$3,000. Fred Hess, Township Clerk, Zurich.

HEAD, MARIA AND CLARA, Tps.—Good water power at Deux Rivieres Rapids. No new buildings erected. H. Beauchamp, Township Clerk, Deux Rivieres.

HENSALL, V.—Two harness shops started. Owns and operates waterworks for fire protection; cost \$6,000. Good openings for boot and shoe factory and knitting factory. One building erected; cost \$6,500. Amount expended on permanent improvements \$860. Amount expended on sanitation \$1,183. Robt. Southron, Village Clerk, Hensall.

HEPWORTH, V.—Good openings for furniture factory, chair factory, cheese factory and carriage factory. Number of buildings erected 3; cost \$2,500. Amount expended on permanent improvements \$134. W. R. White, Village Clerk, Hephworth.

HERSCHEL, Tp.—See Monteagle and Herschel Tps.

HESPELER, Tn.—Owns and operates electric light plant; value \$9,458. Openings for various industries, with good water power; large woollen mill vacant. Number of buildings erected 10; cost \$15,000. Amount expended on permanent improvements \$2,300. Winfield Brewster, Town Clerk, Hespeler.

HIBBERT, Tp.—Openings for any new industry. Amount expended on permanent improvements \$2,752. Amount expended on sanitation \$57. Jas. Jordan, Township Clerk, Dublin.

HILLIER, Tp.—Feed store started. Good openings for shoemaker and dressmaker. Number of buildings erected about 5; cost about \$3,000. Amount

expended on permanent improvements \$1,000. Steph. Nease, Township Clerk, Hillier.

HILTON, Tp.—Sawmill started. Good openings for small woodenware industries. Number of buildings erected 5; cost \$2,000. Amount expended on permanent improvements \$1,100. W. E. Whybourne, Township Clerk, Marksville.

HIMSWORTH, N., Tp.—Good opening for planing mill and tannery; good electric power. Number of buildings erected 3; cost \$8,000. Amount expended on permanent improvements \$699. J. R. Moon, Township Clerk, Callander.

HIMSWORTH, S., Tp.—Good openings for cheese and butter factory, cannery, and heading factory; water and electric power available. Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements \$400. Amount expended on sanitation \$40. A. Oldfield, Township Clerk, Powassan.

HINCHINBROOKE, Tp.—Number of buildings erected 10; cost \$8,000. Amount expended on permanent improvements about \$900, besides \$1,100 statute labour. Geo. A. Smith, Township Clerk, Parham.

HINDON, Tp.—See Anson and Hindon Tps.

HOLLAND LANDING, V.—Opening for any kind of manufacturing. No new buildings erected. Amount expended on permanent improvements about \$250. F. J. Sheppard, Village Clerk, Holland Landing.

HOPE, Tp.—Number of buildings erected 6; cost \$1,300. Amount expended on permanent improvements \$900. Thos. Roberts, Township Clerk, Welcome.

HORTON, Tp.—Number of buildings erected 3; cost \$1,000. Geo. Eady, Township Clerk, Renfrew.

HOUGHTON, Tp.—Good opening for glass factory, with right kind of sand. Number of buildings erected 10; cost \$10,000. Amount expended on permanent improvements \$1,863. W. V. Stevenson, Township Clerk, Houghton Centre.

HOWARD, Tp.—Amount expended on permanent improvements \$5,000. Geo. McDonald, Township Clerk, Ridgetown.

HOWE ISLAND, Tp.—Number of buildings erected 4; cost \$1,600. Amount expended on permanent improvements \$20. Jas. Teavis, Township Clerk, Howe Island.

HOWICK, Tp.—Number of buildings erected 6; cost \$6,000. Amount expended on permanent improvements \$7,442. Amount expended on sanitation \$140. L. Waker, Township Clerk, Gorrie.

HOWLAND, Tp.—Good opening for shoemaker, repair shop for vehicles, etc. Number of buildings erected 4; cost \$450. Amount expended on permanent improvements \$219. F. G. R. Bradbury, Township Clerk, Sheguiandah.

HUDSON, Tp.—Number of buildings erected 9; cost \$3,500. Amount expended on permanent improvements \$3,200. E. Sackrider, Township Clerk, Hillview.

HULLETT, Tp.—Good openings for butter and cheese factories. Number of buildings erected 4; cost about \$3,000. Amount expended on permanent improvements about \$300. Jas. Campbell, Township Clerk, Londesboro.

HUMBERSTONE, Tp.—Factory started. Good openings for any industries on Welland Canal, with electric power, natural gas, etc. Number of buildings erected about 20; cost \$30,000. Amount expended on permanent improvements \$2,319. Amount expended on sanitation \$57. A. E. Near, Township Clerk, Gas Line.

HUMPHREY, Tp.—Number of buildings erected 2; cost \$1,000. Amount expended on permanent improvements \$125. A. A. Young, Township Clerk, Rosseau.

HUNGERFORD, Tp.—Sulphur mines started. Good opening for carriage factory and canning factory. Number of buildings erected 15; cost \$1,500. Amount expended on permanent improvements \$1,500. Amount expended on sanitation \$25. Geo. H. Stokes, Township Clerk, Tweed.

HUNTINGTON, Tp.—Good opening for milk condenser, cement works, canning factory, crushed stone works, etc., with electric power available. Number of buildings erected 4; cost \$3,500. Amount expended on permanent improvements \$485. Jas. Haggarty, Township Clerk, West Huntingdon.

HUNTLEY, Tp.—Good opening for cement block and brick works. Number buildings erected 15; cost \$15,200. Amount expended on permanent improvements \$3,000. Jas. H. Wilson, Township Clerk, Carp.

HUNTSVILLE, Tn.—Owns and operates waterworks, cost \$29,000; electric light system, cost \$24,000. Good openings for wood working factories. Number of houses erected about 5; cost about \$2,000. Amount expended on permanent improvements \$12,000. T. M. Cullon, Town Clerk, Huntsville.

HURON, Tp.—Good openings for canning factory, creamery, and cement, brick and tile yard. Number of buildings erected about 6; cost about \$5,000. Amount expended on permanent improvements \$2,930. Amount expended on sanitation \$40. Angus Martyn, Township Clerk, Ripley.

IGNACE, Tp.—No new buildings erected. Amount expended on permanent improvements \$535. Roy Mason, Township Clerk, Ignace.

INNISFIL, Tp.—Number of buildings erected 13; cost \$10,000. Amount expended on permanent improvements \$2,856. Amount expended on sanitation \$10. R. J. Hill, Township Clerk, Thornton.

IROQUOIS, V.—Owns and operates waterworks and electric light plant; cost \$40,000. Good openings for any industry requiring cheap motive power. No new buildings erected. Jas. Flanagan, Village Clerk, Iroquois.

JAFFRAY AND MELICK, Tps.—Number of buildings erected 6; cost about \$2,000. Amount expended on permanent improvements \$1,417. F. W. Hockley, Township Clerk, Kenora.

JAMES, Tp.—Machine shop and planing mill started. Good opening for custom ore concentrator, pulp and paper mills, brick yard, and water power development to supply power to mines. Number of buildings erected about 50; cost about \$50,000. Amount expended on permanent improvements \$2,242. Amount expended on sanitation \$144. H. E. McKee, Township Clerk, Elk Lake.

JARVIS, V.—Apple evaporator and cider mill started. Good opening for tin-smith. Number of buildings erected 8; cost about \$10,000. Amount expended on permanent improvements about \$1,000. Amount expended on sanitation \$200. C. E. Bourne, Village Clerk, Jarvis.

JOCELYN, Tp.—Good opening for cheese or butter factory. Amount expended on permanent improvements \$1,700. Alf. Kitchen, Township Clerk, Carterton.

JOHNSON, Tp.—Good opening for dairying and kindred industries. Amount expended on permanent improvements \$2,300. W. H. Butterworth, Township Clerk, Desbarats.

JOLY, Tp.—Hardwood sawmill started. Good openings for wood-working industries with splendid water power. Number of buildings erected 3; cost \$1,000. Amount expended on permanent improvements \$125. Geo. Harkness, Township Clerk, Sundridge.

JONES, Tp.—See Sherwood, Jones and Burns Tps.

KALADAR, ANGLESEA AND EFFINGHAM, Tps.—Planing mill started. Good opening for cheese box factory. Number of buildings erected 4; cost \$2,000.

Amount expended on permanent improvements \$364. M. Lessard, Township Clerk, Flinton.

KEARNEY, Tn.—Saw mill started. Owns and operates waterworks for fire protection; cost \$700. Good openings for planing mill, sash and door factory, cooperage, veneering and basket factory; good power available. No new buildings erected. Amount expended on permanent improvements \$50. Amount expended on sanitation \$255. J. J. Brosman, Town Clerk, Kearney.

KEEWATIN, Tn.—Good openings for pulp and paper mill, furniture factory, pail, butter tub and box factory, flour mill, factory for pleasure boats, canoes, etc. Number of buildings erected 8; cost \$6,500. Amount expended on permanent improvements \$1,500. W. J. Craig, Town Clerk, Keewatin.

KEMPTVILLE, V.—Good opening for any manufacturing plant. Number of buildings erected 2; cost about \$3,000. Amount expended on permanent improvements \$1,300. S. H. Guest, Village Clerk, Kemptville.

KENNEBEC, Tp.—Good opening for pulp mill. Number of buildings erected about 10; cost about \$5,500. Amount expended on permanent improvements \$1,000. D. A. Osborne, Township Clerk, Arden.

KENORA, Tn.—Owns and operates hydro-electric power; cost \$379,741; electric light system; cost \$38,839; telephone system; cost \$17,453; waterworks; cost \$207,128. Good openings for flour mill and any industry requiring wood or iron. Number of buildings erected, 15; cost \$80,000. Amount expended on permanent improvements \$5,996. Amount expended on sanitation \$1,301. M. McCulloch, Town Clerk, Kenora.

KEPPEL, Tp.—Good openings for cement works, woodworking factories or industries employing female labour. Number of buildings erected 6; cost \$7,000. Amount expended on permanent improvements about \$2,000. Geo. Atkey, Township Clerk, Wiarton.

KERNS, Tp.—Number of buildings erected 3; cost \$1,500. Amount expended on permanent improvements \$4,000. H. M. Ship, Township Clerk, Milberta.

KINCARDINE, Tn.—Owns and operates waterworks; cost \$47,107; electric light plant; cost \$21,196. Good openings for furniture factory, glass factory, etc. Number of buildings erected 4; cost \$6,500. Amount expended on permanent improvements \$3,687. Amount expended on sanitation \$119. J. H. Scougall, Town Clerk, Kincardine.

KINCARDINE, Tp.—No new buildings erected. Amount expended on permanent improvements \$1,300. R. B. Campbell, Township Clerk, Armow.

KING, Tp.—Owns and operates lighting plant; cost \$1,800. Number of buildings erected 15; cost \$12,700. Amount expended on permanent improvements about \$5,000. Amount expended on sanitation \$250. J. L. Jenkins, Township Clerk, King.

KINGSTON, C.—Shipbuilding yard started. Owns and operates waterworks; cost \$300,000; gas and electric light plant \$360,000. Good opening for iron smelter, iron works, pottery works, automobile factory, grain elevator, shipbuilding yard. Number of buildings erected 148; cost \$177,637. Amount expended on permanent improvements \$22,500. Amount expended on sanitation \$7,000. W. W. Sands, City Clerk, Kingston.

KINGSTON, Tp.—Good opening for vegetable canning factory. Number of buildings erected about 15; cost about \$12,500. Amount expended on permanent improvements about \$2,500. Ch. F. Adair, Township Clerk, Cataraqui.

KINGSVILLE, Tn.—Owns and operates waterworks; cost \$30,000. Opening for almost any kind of manufacturing industry; waterworks, natural gas, good transportation, etc. One building erected; cost \$1,000. Amount expended on permanent improvements \$1,509. Geo. Pearse, Town Clerk, Kingsville.

KINLOSS, Tp.—Amount expended on permanent improvements \$2,123. Geo. G. Moffat, Township Clerk, Langside.

KITLEY, Tp.—Number of buildings erected about 10; cost about \$6,000. Amount expended on permanent improvements about \$800. J. M. Edgar, Township Clerk, Toledo.

KORAH AND PARKE Tps.—Good opening for chair factory, box factory, stave mill or other industry using wood. Number of buildings erected 7; cost \$5,000. Amount expended on permanent improvements \$6,100. R. M. Moore, Township Clerk, Sault Ste. Marie.

LAKE Tp.—See Marmora and Lake Tps.

LAKEFIELD, V.—Good opening for woodworking industries. Number of buildings 3; cost \$1,500. Amount expended on permanent improvements \$1,250. W. Sherin, Village Clerk, Lakefield.

LANARK, Tp.—Amount expended on permanent improvements \$526. Arch. Rankin, Township Clerk, Middleville.

LANARK, V.—No new buildings erected. Amount expended on permanent improvements \$880. W. A. Field, Village Clerk, Lanark.

LANCASTER, Tp.—Number of buildings erected 6; cost \$10,000. Amount expended on permanent improvements \$972. Arch. J. Macdonald, Township Clerk, North Lancaster.

LANCASTER, V.—Good opening for foundry or machine shop. No new buildings erected. Amount expended on permanent improvements about \$800. Amount expended on sanitation \$10. J. McL. Sutherland, Village Clerk, Lancaster.

LANSDOWNE FRONT, Tp.—See Leeds and Lansdowne Front Tps.

LANSDOWNE REAR, Tp.—See Leeds and Lansdowne Rear Tps.

LATCHFORD, Tn.—Good openings for pulp mill, smelter or power plant. No new buildings erected. Amount expended on permanent improvements \$510. Amount expended on sanitation \$20. S. A. Starling, Town Clerk, Latchford.

LAVALLEE, Tp.—Good opening for grist mill. Number of buildings erected 3; cost \$3,000. Amount expended on permanent improvements \$4,815. Arthur Cooke, Township Clerk, Devlin.

LAVANT, Tp.—Good openings for mining. Number of buildings erected 3; cost \$5,000. Amount expended on permanent improvements \$800. Wm. Browning, Township Clerk, Lavant Station.

LAWRENCE, Tp.—See Sherborne, etc., Tps.

LAXTON, DIGBY AND LONGFORD, Tps.—Saw and shingle mill started. Good opening for cheese and butter factory. Number of buildings erected 8; cost \$4,000. Amount expended on permanent improvements \$1,100. E. F. LeCraw, Township Clerk, Norland.

LEAMINGTON, Tn.—Handle factory started. Owns and operates waterworks; cost \$26,000; gas plant \$25,000. Good openings for various industries. Number of buildings erected 10; cost \$45,000. Amount expended on permanent improvements, \$1,600. Amount expended on sanitation \$50. R. M. Selkirk, Town Clerk, Leamington.

LEEDS AND LANSDOWNE FRONT, Tps.—Cement tile works started. Good openings for printing office, carriage and wagon factory, brick and tile yard, etc.

Number of buildings erected 14; cost \$28,000. Amount expended on permanent improvements \$6,311. Amount expended on sanitation \$79. J. D. W. Darling, Township Clerk, Lansdowne.

LEEDS AND LANSDOWNE REAR, Tps.—Number of buildings erected about 20; cost about \$20,000. R. J. Green, Township Clerk, Oak Leaf.

LIMERICK, Tp.—Number of houses erected 2; cost \$1,000. Amount expended on permanent improvements \$668. Jas. W. Ham, Township Clerk, St. Ola.

LINDSAY, Tn.—Handle and woodturning factory started. Owns and operates waterworks; cost \$125,000. Good opening for manufacturing of any kind. Number of buildings erected about 25; cost about \$50,000. Amount expended on permanent improvements, \$25,000. Amount expended on sanitation \$1,500. D. Ray, Town Clerk, Lindsay.

LINDSAY, Tp.—Good openings for woodenware industries. Number of buildings erected 2; cost \$1,000. Amount expended on permanent improvements \$1,200. H. Ribbel, Township Clerk, Brinckman's Corners.

LISTOWEL, Tn.—Electric light plant started. Owns and operates waterworks; cost \$40,000. Good opening and inducements for any new industry. One new building erected; cost \$4,000. Wm. Bright, Township Clerk, Listowel.

LITTLE CURRENT, Tn.—Good opening for box factory and small foundry. Number of buildings erected 10; cost about \$10,000. Amount expended on permanent improvements \$1,000. Amount expended on sanitation \$400. D. McGilvery, Town Clerk, Little Current.

LIVINGSTON, Tp.—See Sherborne, etc., Tp.

LOBO, Tp.—Number of buildings erected 2; cost \$1,500. Amount expended on permanent improvements \$10,834. Amount expended on sanitation \$5. E. R. Barclay, Township Clerk, Poplar Hill.

LOCHIEL, Tp.—Wood wirewound piping started. Number of buildings erected 12; cost \$10,000. Amount expended on permanent improvements \$5,000. V. G. Chisholm, Township Clerk, Lochiel.

LOGAN, Tp.—Number of buildings erected 4; cost \$8,700. Amount expended on permanent improvements \$7,305. Amount expended on sanitation \$35. Francis Jacob, Township Clerk, Brodhagen.

LONDON, C.—Brass works and automobile factory started. Owns and operates waterworks; cost \$934,319; electric light plant; cost \$235,000. Owns London and Port Stanley railway; cost \$1,332,854. Good openings for industries of any kind. Number of buildings erected 882; cost \$805,074. Amount expended on permanent improvements \$30,992. Amount expended on sanitation \$137,095. S. Baker, City Clerk, London.

LONDON, Tp.—Gas Power Co. and show case factory started. Good openings for every kind of industry. Number of buildings erected over 100; cost over \$100,000. Amount expended on permanent improvements \$20,037. Amount expended on sanitation \$258. Mary Grant, Township Clerk, 110 Dundas St., London.

LONGFORD, Tp.—See Laxton, Digby and Longford Tps.

LONGUEUIL, Tp.—Number of buildings erected 7; cost about \$4,200. Amount expended on permanent improvements \$250. Ed. Carriere, Township Clerk, Ritchance.

L'ORIGINAL, V.—Good openings for sawmill and brick yard. Amount expended on permanent improvements about \$1,500. Colin G. O'Brian, Village Clerk, L'Original.

LORNE, Tp.—See Nairn and Lorne Tps.

LOUGHBOROUGH, Tp.—Good opening for cement or brick works. Amount expended on permanent improvements \$1,163. F. M. Lawson, Township Clerk, Sydenham.

LUCAN, V.—Owns and operates electric light plant; cost \$4,500. Good openings for various industries. Number of buildings erected 5; cost about \$10,000. Geo. A. Stanley, Village Clerk, Lucan.

LUCKNOW, V.—Owns and operates waterworks for fire protection; cost \$10,000. Good opening for canning factory, shirt factory and knitting factory. Number of buildings erected 2; cost \$3,100. Jos. Agnew, Village Clerk, Lucknow.

LUTHER E., Tp.—Good openings for flour mill and brick yard. Amount expended on permanent improvements \$2,386. Amount expended on sanitation \$39. J. H. Richardson, Township Clerk, Grand Valley.

LUTHER W., Tp.—Good opening for peat works. Number of buildings erected about 5; cost about \$5,000. Amount expended on permanent improvements \$1,806. Amount expended on sanitation \$48. W. W. Duncan, Township Clerk, Conn.

LYNEDOCH, Tp.—See Brudenell and Lynedoch Tps.

MCCCLINTOCK, Tp.—See Sherborne, etc., Tps.

MCCCLURE, Tp.—See Bangor, Wicklow and McClure, Tps.

MCDUGALL, Tp.—Good openings for various industries, abundant hardwood and water power. No new buildings erected. Amount expended on permanent improvements \$590. W. J. Jones, Township Clerk, Parry Sound.

MCGILLIVRAY, Tp.—Number of buildings erected about 9; cost about \$12,000. Amount expended on permanent improvements about \$2,000. J. D. Drummond, Township Clerk, Ailsa Craig.

MCIRVINE, Tp.—Good openings for sawmill, flour mill, woodenware factories, implement factory, brickyard and pulp factory. No new buildings erected. Amount expended on permanent improvements \$156. Frank J. Strain, Township Clerk, Fort Frances.

MCKELLAR, Tp.—Good opening for woollen mill. Number of buildings erected 5; cost \$1,300. Amount expended on permanent improvements \$351. John Fletcher, Township Clerk, McKellar.

MCKILLOP, Tp.—Number of buildings erected 2; cost \$2,500. Amount expended on permanent improvements \$6,000. M. Murdie, Township Clerk, Winthrop.

McKIM, Tp.—Good opening for cheese and butter factories, chopping mill and customs smelter. Number of buildings erected 3; cost \$1,500. Amount expended on permanent improvements about \$1,800. Phil. Welsher, Township Clerk, Sudbury.

MCLEAN AND RIDOUT, Tps.—Good opening for sawmill. Number of buildings erected about 6; cost about \$2,400. Amount expended on permanent improvements, \$1,014. Amount expended on sanitation about \$40. W. H. Brown, Township Clerk, Bayville.

McMURRICH, Tp.—Hub factory started. Good opening for chair factory. Number of buildings erected 6; cost about \$3,000. Amount expended on permanent improvements \$200. D. C. McFarlane, Township Clerk, Sprucedale.

McNAB, Tp.—Blasting powder factory started. Number of buildings erected 12; cost \$9,500. Amount expended on permanent improvements \$1,380. John McGregor, Township Clerk, Renfrew.

MACAULAY, Tp.—Amount expended on permanent improvements \$300 by government. Amount expended on sanitation \$5. Alex. Barrow, Township Clerk, Bracebridge.

MACDONALD, MEREDITH AND ABERDEEN Tps.—Good opening for sawmill. Number of buildings erected 15; cost about \$10,000. Amount expended on permanent improvements \$1,700. Amount expended on sanitation \$25. R. J. Thomas, Township Clerk, Echo Bay.

MACHAR, Tp.—Good openings for woodworking industries. No new buildings erected. Amount expended on permanent improvements \$253. H. O. Boone, Township Clerk, South River.

MACHIN, Tp.—Good openings for grist mill, pulp mill and sawmill; good water power. Number of buildings erected 3; cost \$1,000. Amount expended on permanent improvements \$400. Amount expended on sanitation \$1,600. Geo. Ructe, Township Clerk, Eagle River.

MADOC, Tp.—Talc works started. Number of buildings erected about 6; cost about \$6,000. Amount expended on permanent improvements \$1,200. Wm. F. Allen, Township Clerk, Cooper.

MADOC, V.—Owns and operates electric light plant; cost about \$15,000. Good openings for canning factory, foundry, condensed milk factory, pork packing and talc industries. Number of buildings erected 3; cost about \$2,400. Amount expended on permanent improvements \$890. Amount expended on sanitation about \$50. W. J. Hill, Village Clerk, Madoc.

MAIDSTONE, Tp.—Owns and operates telephone system; cost about \$10,000. Amount expended on permanent improvements \$28,468. Amount expended on sanitation \$57. M. McHugh, Township Clerk, Woodslee.

MALAHIDE, Tp.—Number of buildings erected 10; cost \$7,000. Amount expended on permanent improvements \$5,980. Amount expended on sanitation \$8. M. E. Lyon, Township Clerk, Aylmer.

MALDEN, Tp.—Number of buildings erected 14; cost \$14,700. Amount expended on permanent improvements \$2,600. Jas. Honor, Township Clerk, Amherstburg.

MANVERS, Tp.—Number of buildings erected 9; cost \$3,750. Amount expended on permanent improvements \$2,667. Amount expended on sanitation \$37. J. J. Greston, Township Clerk, Bethany.

MARA, Tp.—Number of buildings erected about 20; cost about \$10,000. W. R. McPhee, Township Clerk, Brechin.

MARIA, Tp.—See Head, Maria and Clara Tps.

MARCH, Tp.—Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements \$1,000. Thos. Richardson, Township Clerk, South March.

MARIPOSA, Tp.—Good openings for shoemaker and tailor. Number of buildings erected about 6; cost about \$9,000. Amount expended on permanent improvements \$11,120, including 5,300 days statute labour. Amount expended on sanitation \$233. J. B. Weldon, Township Clerk, Oakwood.

MARKHAM, Tp.—Number of buildings erected 10; cost \$18,000. Amount expended on permanent improvements about \$15,000. C. H. Stiver, Township Clerk, Unionville.

MARKHAM, V.—Owns and operates waterworks and electric light plant; cost about \$15,000. Good opening for foundry. Number of buildings erected about 5; cost about \$5,000. M. White, Village Clerk, Markham.

MARLBOROUGH, Tp.—Number of buildings erected 2; cost \$1,000. Edw. Mills, Township Clerk, Malakoff.

MARMORA, V.—Owns and operates electric light plant; cost about \$4,500. Good openings for woollen mill, etc. One building erected; cost about \$500. Amount expended on permanent improvements \$275. Amount expended on sanitation \$25. H. W. Sabine, Village Clerk, Marmora.

MARTLAND, Tp.—Number of buildings erected 10; cost about \$3,500. Amount expended on permanent improvements \$1,000. Joseph Guerin, Township Clerk, Chartrand Corner.

MARYBOROUGH, Tp.—Good opening for almost any kind of industry. Number of buildings erected 2; cost \$2,800. Amount expended on permanent improvements \$472. Amount expended on sanitation \$102. W. W. Scott, Township Clerk, Moorefield.

MARYSBURGH N., Tp.—Good opening for fruit and vegetable canning. Number of buildings erected 10; cost \$13,900. Amount expended on permanent improvements \$1,200. Levi Williams, Township Clerk, Picton.

MARYSBURGH S., Tp.—Number of buildings erected 10; cost \$10,000. Amount expended on permanent improvements \$300. H. F. Grimmon, Township Clerk, Port Milford.

MASSEY, Tn.—Owns and operates waterworks; cost about \$20,000. Number of buildings erected 10; cost \$7,000. Amount expended on permanent improvements \$38. D. W. Cantelon, Town Clerk, Massey.

MATAWATCHAN, Tp.—See Griffith and Matawatchan Tps.

MATCHEDASH, Tp.—Good opening for blacksmith shop. Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements about \$1,600. E. W. Kitchen, Township Clerk, Lovering.

MATILDA, Tp.—Number of buildings erected 5; cost \$5,000. Amount expended on permanent improvements \$4,062. J. J. Payne, Township Clerk, Brinston.

MATTAWA, Tn.—Good openings for various industries. No new buildings erected. Amount expended on permanent improvements \$376. John McMeekin, Town Clerk, Mattawa.

MATTAWAN, Tp.—Good openings for creamery, pulp mill and woodenware industries. No new buildings erected. Amount expended on permanent improvements \$409, mostly by Government. A. Borrowman, Township Clerk, Mattawa.

MAXVILLE, V.—Good openings for saw and door factory and sawmill. Number of houses erected 2; cost \$4,000. Amount expended on permanent improvements \$100. D. P. McDiarmid, Village Clerk, Maxville.

MAY, Tp.—See Salter, May and Harrow Tps.

MAYO, Tp.—No new buildings erected. Amount expended on permanent improvements \$325. Robt. Ramsbottom, Township Clerk, Rowland.

MEAFORD, Tn.—Shoepack factory started. Owns and operates waterworks; cost \$35,000. Good openings for fruit cannery, grain elevator, flour mill and wood-working industries. Number of buildings erected about 20; cost about \$40,000. Amount expended on permanent improvements \$10,500. Amount expended on sanitation about \$500. Geo. G. Albery, Town Clerk, Meaford.

MEDONTE, Tp.—Good opening for cheese factory and creamery, tile piping and cement piping works. Number of buildings erected 12; cost about \$10,000. Amount expended on permanent improvements \$5,500. T. D. Robinson, Township Clerk, Moonstone.

MEDORA AND WOOD, Tps.—Good openings for various industries with good water power. Number of buildings 5; cost \$3,000. Amount expended on permanent improvements \$3,060. Amount expended on sanitation \$300. H. C. Guy, Township Clerk, Dudley.

MELANCTHON, Tp.—Number of buildings erected about 12; cost about \$15,000. Amount expended on permanent improvements \$1,437. Jas. Brown, Township Clerk, Melancthon.

MEREDITH, Tp.—See Macdonald, Meredith and Aberdeen Tps.

MERRICKVILLE, V.—Good openings for various industries with good water-power. Number of buildings erected 2; cost about \$4,000. Amount expended on permanent improvements \$2,000. Amount expended on sanitation \$500. D. J. Hall, Village Clerk, Merrickville.

MERRITON, V.—Rubber factory and paper mill started. Owns and operates waterworks, cost \$86,181; electric light power \$11,008. Good opening for various industries with good electric and water power. Number of buildings erected 5; cost \$160,000. Amount expended on permanent improvements \$2,451. Amount expended on sanitation \$100. R. Clark, Village Clerk, Merriton.

MERSEA, Tp.—Number of buildings erected about 20; cost about \$180,000. Amount expended on permanent improvements \$3,600. Amount expended on sanitation about \$100. Alf. Hairsine, Township Clerk, Leamington.

METCALFE, Tn.—Number of buildings erected 3; cost \$3,500. Amount expended on permanent improvements \$4,400, besides 1,100 days statute labour. Amount expended on sanitation \$34. Rich. Ward, Township Clerk, Strathroy

METHUEN, Tp.—See Belmont and Methuen Tps.

MIDDLETON, Tp.—Number of buildings erected 8; cost \$8,800. Amount expended on permanent improvements \$2,411. D. W. White, Township Clerk, Courtland.

MIDLAND, Tn.—Owns and operates waterworks; cost \$87,500; electric light plant; cost \$47,700. Good opening for woodenware factories and iron and steel industries. Number of buildings erected 29; cost \$30,000. Amount expended on permanent improvements \$8,000. Amount expended on sanitation \$7,000. Frank R. Weston, Town Clerk, Midland.

MILLBROOK, V.—Good openings and inducements for any class of industries. No new buildings erected. Amount expended on permanent improvements \$4,000. Walt. W. Gillott, Village Clerk, Millbrook.

MILLER, Tp.—See Clarendon and Miller Tps.

MILTON, Tn.—Pressed brick and tile yard started. Owns and operates waterworks; cost \$25,000; electric light plant; cost \$15,000. Good openings for almost any kind of industry. Number of buildings erected 15; cost \$26,000. Amount expended on permanent improvements about \$1,000. G. A. Hemstreet, Town Clerk, Milton.

MILVERTON, V.—Good openings for woollen mill, cheese and butter factory and brick yard. Number of buildings erected 2; cost \$7,000. Amount expended on permanent improvements \$2,700. W. D. Weir, Village Clerk, Milverton.

MIMICO, V.—Number of buildings erected 30; cost about \$15,000. Andrew Dods, Village Clerk, Mimico.

MINDEN, Tp.—Good opening for furniture factory and other industries requiring waterpower. Amount expended in permanent improvements, about \$400. E. A. Rogers, Township Clerk, Minden.

MINTO, Tp.—Number of buildings erected 9; cost \$9,000. Amount expended on permanent improvements \$1,000. W. D. McLellan, Township Clerk, Harriston.

MITCHELL, Tn.—Owns and operates waterworks and electric light plant; cost \$29,000. Amount expended on permanent improvements \$1,125. A. D. Cameron, Town Clerk, Mitchell.

MONAGHAN N., Tp.—Good openings for any kind of industry, with two railways and Trent Canal adjacent. Number of buildings erected 10; cost \$15,000. Amount expended on permanent improvements \$4,000. G. W. Bennett, Township Clerk, Peterborough.

MONAGHAN S., Tp.—Number of buildings erected 3; cost about \$3,500. Amount expended on permanent improvements \$1,600. J. A. Porter, Township Clerk, S. Monaghan.

MONCK, Tp.—Amount expended on permanent improvements \$1,844. Amount expended on sanitation \$4. H. F. Bickmore, Township Clerk, Alport.

MONMOUTH, Tp.—Graphite works started. Good opening for furniture factory. Number of buildings erected about 12; cost about \$5,000. Amount expended on permanent improvements about \$5,000. Amount expended on sanitation \$20. H. Walker, Township Clerk, Wilberforce.

MONO, Tp.—Cheese factory started. Good openings for cheese and butter factories. Number of buildings erected 2; cost about \$2,500. Amount expended on permanent improvements about \$5,000. Geo. H. Harshaw, Township Clerk, Camilla.

MONTAGUE, Tp.—Good water power and openings for industries. Number of buildings erected about 10; cost about \$10,000. Amount expended on permanent improvements \$1,000. J. E. Edmonds, Township Clerk, Smith's Falls.

MONTEAGLE AND HERSCHELL, Tps.—Graphite mining started. Good openings for furniture factory, pulp factory, planing mills, etc. Number of buildings erected 13; cost \$11,000. Amount expended on permanent improvements \$700. Amount expended on sanitation \$6. G. A. Jordison, Township Clerk, Maynooth.

MOORE, Tp.—Good openings for tile yard and for cement brick and block works. Number of buildings erected about 23; cost about \$17,000. Amount expended on permanent improvements \$3,000. Ch. C. Watson, Township Clerk, Brigden.

MORLEY, Tp.—Two sawmills started. Good openings for flour mill and butter factory. Number of buildings erected 10; cost \$5,000. Amount expended on permanent improvements \$4,500. Guy G. Gamsby, Township Clerk, Stratton Station.

MORNINGTON, Tp.—Number of buildings erected 15; cost \$14,100. Wm. Waddell, Township Clerk, Burns.

MORRIS, Tp.—Good opening for beet sugar factory. Number of buildings erected 4; cost \$2,600. Amount expended on permanent improvements \$3,700. Amount expended on sanitation \$20. A. MacEwen, Township Clerk, Bluevale.

MORRISBURGH, V.—Owns and operates waterworks; cost \$30,000; electric light system about \$30,000. No new buildings erected. Amount expended on permanent improvements \$2,504. F. R. Chalmers, Village Clerk, Morrisburgh.

MOULTON, Tp.—Number of buildings erected 10; cost \$7,000. Amount expended on permanent improvements \$275. Amount expended on sanitation \$47. W. M. Allen, Township Clerk, Moulton.

MOUNT FOREST, Tn.—Owns and operates waterworks and electric light plant; cost \$45,000. Good opening for furniture factory. Number of buildings erected 2; cost \$4,000. Amount expended on permanent improvements \$500. W. C. Perry, Town Clerk, Mount Forest.

MULMER, Tp.—Electric power and light works started. Amount expended on permanent improvements \$3,053. Geo. Laking, Township Clerk, Shelburne.

MURRAY, Tp.—Number of buildings erected about 4; cost about \$3,000.

Amount expended on permanent improvements \$1,648. W. Little, Township Clerk, Wooler.

MUSKOKA, Tp.—Good opening for flour mill. One new building erected; cost \$200. Amount expended on permanent improvements \$876. Jas. Brydon, Township Clerk, Gravenhurst.

NAIRN AND LORNE, Tps.—Good opening for sawmill, etc. Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements \$350. Jos. A. Edwards, Township Clerk, Nairn Centre.

NAPANEE, Tn.—Owns and operates electric light plant; cost about \$48,000. Good openings for canning factory and furniture factory. Number of buildings erected 3; cost about \$20,000. Amount expended on permanent improvements about \$4,000. Amount expended on sanitation about \$8,000. W. A. Grange, Town Clerk, Napanee.

NASSAGAWEYA, Tp.—Number of buildings erected from 10 to 15; cost about \$30,000. Amount expended on permanent improvements \$5,000. M. Beattie, Township Clerk, Campbellville.

NEEBING, Tp.—Good openings for various industries. No new buildings erected. Amount expended on permanent improvements \$6,656. W. M. Rae, Township Clerk, Fort William.

NEELON AND GARSON, Tps.—Good opening for cheese factory and sawmill. Number of buildings erected 6; cost about \$2,000. Amount expended on permanent improvements \$2,269. J. R. Vincent, Township Clerk, Sudbury.

NELSON, Tp.—Number of buildings erected 8; cost \$11,200. Amount expended on permanent improvements \$5,000. J. F. Richardson, Township Clerk, Milton.

NEPEAN, Tp.—Sash and door factory started. Good openings for factories of any kind. Number of buildings erected about 50; cost \$60,000. Amount expended on permanent improvements \$6,006. Amount expended on sanitation \$624. A. G. Dawson, Township Clerk, Westboro.

NEPIGON, Tp.—Owns and operates waterworks; cost \$2,500. Good water power can be developed for industries. Number of buildings erected 5; cost \$4,400. Amount expended on permanent improvements \$900. T. Blair, Township Clerk, Nepigon.

NEUSTADT, V.—No new buildings erected. Amount expended on permanent improvements \$640. R. W. Walden, Village Clerk, Neustadt.

NEW HAMBURG, V.—Owns and operates hydro-electric lighting plant; cost \$20,000. Good openings for furniture factory and fruit cannery. Number of buildings erected 8; cost \$30,000. W. Millar, Village Clerk, New Hamburg.

NEW LISKEARD, Tn.—Grist mill started. Owns and operates waterworks; cost \$79,250. Good openings for pulp mills, woodenware manufactures, grist mill, iron works, smelter, sawmill, planing mill, sash and door factory, etc. Number of buildings erected 35; cost \$75,000. Amount expended on permanent improvements \$2,651. Amount expended on sanitation \$21,628. P. R. Craven, Town Clerk, New Liskeard.

NEWBORO, V.—Number of buildings erected about 40; cost about \$20,000. Amount expended on permanent improvements \$800. L. S. Lewis, Village Clerk, Newboro.

NEWBURGH, V.—Good opening for carriage works, etc. No new buildings erected. Amount expended on permanent improvements \$508. Ch. Welbanks, Village Clerk, Newburgh.

NEWBURY, V.—Sawmill started. One building erected; cost \$2,000. Amount expended on permanent improvements \$300. Chas. Tucker, Village Clerk, Newbury.

NEWCASTLE, V.—Good openings for cooperage, canning factory, automobile repair shop, etc. Number of buildings erected 2; cost \$4,000. Amount expended on permanent improvements \$500. Amount expended on sanitation \$100. Geo. Jamieson, Village Clerk, Newcastle.

NEWMARKET, Tn.—Owns and operates waterworks; cost \$29,000; electric light cost \$22,000. Good openings for any industry. Number of buildings erected about 70; cost about \$105,000. Amount expended on permanent improvements \$9,630. J. E. Hughes, Town Clerk, Newmarket.

NIAGARA, Tn.—Tobacco factory started. Owns and operates waterworks; cost \$35,000; electric light plant; cost \$35,000. Good opening for basket factory. Number of buildings erected 4; cost \$12,000. Amount expended on permanent improvements about \$1,500. Amount expended on sanitation about \$3,600. W. E. Lyall, Town Clerk, Niagara.

NIAGARA, Tp.—Number of buildings erected 5; cost \$10,000. Amount expended on permanent improvements \$2,000. John Knox, Township Clerk, Virgil.

NIAGARA FALLS, C.—Hat factory and artificial wood factory started. Owns and operates waterworks; cost \$200,000; electric light plant \$125,000. Good opening for any industry. Number of buildings erected 95; cost about \$300,000. Amount expended in permanent improvements \$16,000. Amount expended on sanitation \$6,500. W. J. Seymour, City Clerk, Niagara Falls.

NICHOL, Tp.—Good openings for industries, with water power going to waste. No new buildings erected. Amount expended on permanent improvements \$1,050.

NIGHTINGALE, Tp.—See Sherborne, etc., Tps.

NIPISSING, Tp.—Good openings for industries requiring cheap lumber and electric power. One building erected; cost \$3,000. Amount expended on permanent improvements \$90. W. S. Rowson, Township Clerk, Nipissing.

MISSOURI E., Tp.—Number of buildings erected 12; cost about \$10,500. Amount expended on permanent improvements \$4,000. Amount expended on sanitation \$350. Geo. B. Anderson, Township Clerk, Lakeside.

MISSOURI W., Tp.—Number of buildings erected 5; cost \$7,000. Amount expended on permanent improvements \$2,500. J. H. Davis, Township Clerk, St. Mary's.

NORTH BAY, Tn.—Owns and operates waterworks; cost about \$100,000. Good openings for industries of all kinds. Number of buildings erected about 80; cost about \$180,000. Amount expended on permanent improvements \$26,552. Amount expended on sanitation about \$17,000. M. W. Flannery, Town Clerk, North Bay.

NORWICH, V.—Good opening for any manufacturing business. Number of buildings erected 3; cost about \$6,000. Amount expended on permanent improvements about \$300. Wm. Fairley, Village Clerk, Norwich.

NORWICH N., Tp.—Good opening for cider mill and evaporator. Number of buildings erected about 16; cost about \$12,000. Amount expended on permanent improvements \$5,544. Amount expended on sanitation \$100. Ch. F. Burgess, Township Clerk, Burgessville.

NORWICH S., Tp.—Good openings for almost any kind of manufacturing. Number of buildings erected 9; cost \$6,450. Amount expended on permanent improvements \$5,213. Alex. McFarlane, Township Clerk, Otterville.

NORWOOD, V.—Woodworking industry started. Good opening for carding mill, sash and door factory, or any other industry requiring water power. Number of

buildings erected 3; cost \$7,000. Amount expended on permanent improvements \$100. **E. J. Laing, Village Clerk, Norwood.**

NOTTAWASAGA, Tp.—Number of buildings erected about 6; cost about \$4,800. Amount expended on permanent improvements \$3,800. Amount expended on sanitation \$60. **L. MacAllister, Township Clerk, Duntroon.**

OAKLAND, Tp.—Number of buildings erected 3; cost \$1,700. Amount expended on permanent improvements \$649. **Percy M. Button, Township Clerk, Oakland.**

OAKLEY, Tp.—Good opening for hoop and stave factory or other woodenware. No new buildings erected. Amount expended on permanent improvements \$278. **H. J. Johnston, Township Clerk, Vancoughnet.**

OAKVILLE, Tn.—Owns and operates waterworks; cost \$70,000; electric light plant; cost \$16,000. Good openings for industries of any kind. Number of buildings erected 43; cost \$138,000. Amount expended on permanent improvements \$6,144. **Ch. A. Bradbury, Town Clerk, Oakville.**

O'CONNOR, Tp.—Good opening for creamery. Number of buildings erected 8; cost \$2,000. Amount expended on permanent improvements \$1,000. **C. J. Evans, Township Clerk, O'Connor.**

OIL SPRINGS, V.—Good opening for woodenware industries. One building erected \$750. Amount expended on permanent improvements \$568. Amount spent on sanitation \$92. **D. P. Sisk, Village Clerk, Oil Springs.**

OLDEN, Tp.—Number of buildings erected 2; cost \$1,000. Amount expended on permanent improvements \$1,590. Amount expended on sanitation \$26. **W. P. Bender, Township Clerk, Long Lake.**

OLIVER, Tp.—Owns and operates telephone systems; cost \$6,500. Good opening for furniture factory. Number of buildings erected 10; cost about \$4,000. Amount expended on permanent improvements \$1,275. **Ch. R. B. Hill, Township Clerk, Murillo.**

OMEMEE, V.—Good opening for any industry using wood. Number of buildings erected 3; cost \$7,400. Amount expended on permanent improvements \$250. **G. A. Balfour, Village Clerk, Omemee.**

ONEIDA, Tp.—Sand plant for glass started. Good opening for boring for gas. Number of buildings erected about 20; cost about \$10,000. Amount expended on permanent improvements \$703. Amount expended on sanitation \$33. **John Senn, Township Clerk, York.**

ONONDAGA, Tp.—Numerous gas and oil wells started. Number of buildings erected 4; cost about \$4,600. Amount expended on permanent improvements \$1,400. **S. J. McKelvey, Township Clerk, Tuscarora.**

OPS, Tp.—Good openings for various industries. Number of buildings erected 5; cost \$8,500. Amount expended on permanent improvements \$1,245. Amount expended on sanitation \$58. **W. E. Agnew, Township Clerk, Lindsay.**

ORANGEVILLE, Tn.—Owns and operates waterworks; cost \$60,000. Good opening for manufacturers of any kind, except furniture and cement. Number of buildings erected 3; cost \$2,400. Amount expended on permanent improvements \$560. **A. A. Hughson, Town Clerk, Orangeville.**

ORFORD, Tp.—Number of buildings erected 4; cost \$8,500. Amount expended on permanent improvements \$3,330. Amount expended on sanitation \$78. **F. Littlejohns, Township Clerk, Highgate.**

ORILLIA, Tp.—Good openings for factories. Number of buildings erected about 18; cost about \$18,000. Amount expended on permanent improvements \$4,800. **John C. Rose, Township Clerk, Orillia.**

ORO, Tp.—Number of buildings erected 9; cost about \$15,000. Amount expended on permanent improvements \$1,265. H. J. Tudhope, Township Clerk, Rugby.

OSHAWA, Tn.—Stove factory and automobile factory started. Owns and operates waterworks; cost \$142,144. Good opening for brass works, furniture factory and iron working machinery. Number of buildings erected about 110; cost about \$300,000. Amount expended on permanent improvements \$2,700. Amount expended on sanitation \$3,000. Thos. Morris, Town Clerk, Oshawa.

OSNABRUCK, Tp.—Sash and door factory, hat factory and grinding mill started. Good openings for canning factory and concrete works. Number of buildings erected about 25; cost about \$25,000. Amount expended on permanent improvements \$6,500, besides 4,675 days statute labour. Amount expended on sanitation \$36. H. E. Hodgins, Township Clerk, Osnabruk Centre.

OSO, Tp.—Good openings for rolling mill, cement works and summer hotel. Number of buildings erected 4; cost \$6,500. Amount expended on permanent improvements \$600. Amount expended on sanitation \$50. Bertram Smith, Township Clerk, Sharbot Lake.

OSPREY, Tp.—Veneer mill and basket factory started. Good openings for woodenware industries, brick yard and cement works. Number of buildings erected about 70; cost about \$62,000. Amount expended on permanent improvements \$4,149. Amount expended on sanitation \$97. Thos. Scott, Township Clerk, McIntyre.

OTONABEE, Tp.—Number of buildings erected about 10; cost about \$7,500. Amount expended on permanent improvements \$4,291. Amount expended on sanitation \$70. J. M. Drummond, Township Clerk, Keene.

OTTAWA, C.—Gasoline engine factory, roofing paint factory, paper board factory, paper bags and paper factory, sash and door factory, haircloth machinery and saw factory, cleansing preparations factory, dustless floor preparation factory, disinfectant factory, box factory, ornamental glass factory and foundry started. Owns and operates waterworks; cost \$2,400,000; electric light and power plant; \$350,000. Good opening for creosoting plant, furniture factory, woodenware industries, paper box factory, paper factory, flour mill, oatmeal and cereal food factory, glove, shirt and collar factory, shoe factory, automobile factory, tile yard, pottery, clothing factory, bag factory, biscuit bakery, roller mill products, elevator and mill building machinery, barrel factory, rubber and felt goods factory and textile factories. Number of buildings erected 671; cost about \$3,022,650. Amount expended on permanent improvements \$278,210. Amount expended on sanitation \$86,342. John Henderson, City Clerk, Ottawa.

OWEN SOUND, Tn.—Furniture factory, cold storage plant, sawmill, and sash and door factory, ankle support factory, lime kiln, brick yard started, and two foundries doubled in capacity. Owns and operates waterworks, value \$260,659; electric plant, value \$120,998; gas plant, value \$93,400. Good openings for furniture factory, agricultural implement factory, foundries and machine shops. Number of buildings erected, 78; cost \$300,900. Amount expended on permanent improvements, \$16,464. Amount expended on sanitation, \$4,854. Ch. Gordon, Town Clerk, Owen Sound.

OXFORD on Rideau, Tp.—Number of buildings erected, 5; cost \$4,500. Amount expended on permanent improvements \$8,584, of which \$7,500 by county. Ch. H. Anderson, Township Clerk, Oxford Mills.

OXFORD E. Tp.—Number of buildings erected 12; cost \$6,250. Amount ex-

pended on permanent improvements \$5,812. Amount expended on sanitation \$89.
F. G. Jackson, Township Clerk, Oxford Centre.

OXFORD N. Tp.—No new buildings erected. Amount expended on permanent improvements about \$2,000. Rich. Seldon, Township Clerk, Ingersoll.

OXFORD W. Tp.—Cement works, tiles, posts, etc., started. Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements \$3,158.
B. G. Jenvey, Township Clerk, Ingersoll.

PAIPOONGE, Tp.—Good openings for brickyard, brewery and dairy. Number of buildings 2; cost \$3,500. Amount expended on permanent improvements \$4,547.
G. F. Scholfield, Township Clerk, Fort William.

PAISLEY, V.—Owns and operates waterworks; cost \$10,000. Good openings and inducements for various industries. One building erected \$1,000. Amount expended on permanent improvements \$440. Amount expended on sanitation \$315.
J. C. Gibson, Village Clerk, Paisley.

PAKENHAM, Tp.—Good opening for almost any kind of industry. Number of buildings erected 2; cost about \$5,000. Amount expended on permanent improvements \$250. Jas. Connery, Township Clerk, Cedar Hill.

PALMERSTON, Tn.—Owns and operates waterworks, cost \$45,000; electric light plant, cost \$16,000. Good openings for pork-packing and for wood-working industry. Number of buildings erected 4; cost \$10,000. Amount expended on permanent improvements \$4,000. Amount expended on sanitation \$4,000. H. Hyndman, Town Clerk, Palmerston.

PALMERSTON and North and South Canonto Tps.—Good openings for various industries, with water power available. No new buildings erected. Amount expended on permanent improvements \$400. Jas. Geddes, Township Clerk, McLaren's Depot.

PAPINEAU, Tp.—Good openings for creamery, pulp mill, and woodenware industries. Number of buildings erected 3; cost about \$700. Amount expended on permanent improvements \$1,807, mostly by Government. A. Borrowman, Township Clerk, Mattawa.

PARIS, Tn.—Owns and operates waterworks, cost \$84,969; electric light plant \$55,324. Good openings for almost any kind of industry. Number of buildings erected 12; cost \$30,000. Amount expended on permanent improvements \$3,516. Amount expended on sanitation \$200. Thos. McCosh, Town Clerk, Paris.

PARKE, Tp.—See Korah and Parke Tps.

PARKHILL, Tn.—Novelties factory and brick and tile yard started. Good opening for various industries. One building erected; cost \$30,000. Amount expended on permanent improvements \$300. Amount expended on sanitation \$173.
J. H. Laughton, Town Clerk, Parkhill.

PARRY SOUND, Tn.—Wood alcohol and charcoal factory, planing mill, sash factory, and boat-buildings works started. Owns and operates waterworks; cost about \$75,000; electric light and power plant; cost about \$70,000. Good opening for furniture factory, woollen mill, grist mill, tannery, woodworking industries. Number of houses erected about 15; cost about \$125,000. Amount expended on permanent improvements about \$2,000. Amount expended on sanitation about \$1,000. E. E. Armstrong, Town Clerk, Parry Sound.

PEEL, Tp.—Number of buildings erected 3; cost about \$4,000. Amount expended on permanent improvements \$3,500. Amount expended on sanitation \$200.
Edw. Gainer, Township Clerk, Arthur.

PELEE, Tp.—Good opening for canning factory, tobacco factory and cement

tile works. Number of buildings erected 19; cost \$15,000. Amount expended on permanent improvements \$750. Wm. Stewart, Township Clerk, Pelee Island.

PELHAM, Tp.—Sand and gravel pits opened. Good opening for canning factory. Number of buildings erected 20; cost \$38,000. Amount expended on permanent improvements \$4,096, besides 3,900 days statute labour. Amount expended on sanitation \$78. A. M. Armbrust, Township Clerk, Ridgeville.

PEMBROKE, Tn.—Owns and operates waterworks; cost about \$100,000. Good opening for boot and shoe factory and wooden wares. Number of buildings erected 10; cost \$45,500. Amount expended on permanent improvements \$2,928. Amount expended on sanitation \$442. A. J. Fortier, Town Clerk, Pembroke.

PEMBROKE, Tp.—Good openings for brick and tile yard, sawmill, foundry, and wooden ware industries. Number of buildings erected 2; cost \$2,900. Amount expended on permanent improvements \$99. H. W. Perrett, Township Clerk, Pembroke.

PENETANGUISHENE, Tn.—Stove factory and foundry started. Owns and operates waterworks; cost \$36,000. Good opening for sand and lime brick works. Number of buildings erected 18; cost \$15,000. Amount expended on permanent improvements \$750. Amount expended on sanitation \$2,250. W. H. Hewson, Town Clerk, Penetanguishene.

PERCY, Tp.—Cheese and butter factory started. Number of buildings erected about 5; cost about \$10,000. Amount expended on permanent improvements \$3,000. P. S. Ewing, Township Clerk, Warkworth.

PERTH, Tn.—Shoe factory started. Owns and operates street arc lights; cost \$13,000. Good openings for any kind of industries. Number of buildings erected about 10; cost about \$30,000. Amount expended on permanent improvements \$1,000. Amount expended on sanitation \$1,500. J. A. Kerr, Town Clerk, Perth.

PETERBOROUGH, C.—Owns and operates waterworks; cost \$470,959. Good openings for industries of all kinds, with hydro-electric power and exceptional shipping facilities. Number of buildings erected 231; cost \$517,958. Amount expended on permanent improvements \$59,410. Amount expended on sanitation \$16,574. S. R. Armstrong, City Clerk, Peterborough.

PETEWAWA, Tp.—Number of buildings erected 8; cost \$3,150. Amount expended on permanent improvements \$75. Amount expended on sanitation \$9. Fred. Kossatz, Township Clerk, Pembroke.

PETROLEA, Tn.—Owns and operates waterworks; cost \$190,430. Good openings for flour mill and planing mill. Number of buildings erected 2; cost \$30,000. Amount expended on permanent improvements \$57,880. Amount expended on sanitation \$550. J. McHattie, Town Clerk, Petrolea.

PICKERING, Tp.—Openings for various industries, with water power available. Number of buildings erected about 20; cost about \$27,500. Amount expended on permanent improvements \$9,093. Amount expended on sanitation \$109. Donald R. Beaton, Township Clerk, Whitevale.

PICTON, Tn.—Owns and operates waterworks and electric light plant; cost \$60,350. Good openings for canning factory, box factory, broom factory, etc. Number of buildings erected 2; cost \$23,500. Amount expended on permanent improvements \$8,431. R. H. Hubbs, Town Clerk, Picton.

PILKINGTON, Tp.—Number of buildings erected 9; cost \$11,300. Amount expended on permanent improvements \$1,773. Geo. F. Cromar, Township Clerk, Salem.

PITTSBURGH, Tp.—Number of buildings erected 7; cost \$4,150. Amount ex-

pended on permanent improvements \$4,092. Amount expended on sanitation \$5. Wm. Murray, Township Clerk, Barriefield.

PLANTAGENET N. Tp.—Good opening for sash and door factory. Number of buildings erected about 24; cost about \$25,000. D. M. Viau, Township Clerk, Plantagenet.

PLUMMER Additional, Tp.—Good openings for wood working industries. One building erected; cost \$200. Amount expended on permanent improvements \$1,300. N. H. Peterson, Township Clerk, Bruce Mines.

PLYMPTON, Tp.—Good openings for fruit evaporator, fruit cannery, and field tile yard. Number of buildings erected 12; cost \$2,300. Amount expended on permanent improvements \$4,492. J. K. Cairns, Township Clerk, Camlachie.

POINT EDWARD, V.—Openings for any kind of industry. Amount expended on permanent improvements \$200. Amount expended on sanitation \$28. J. F. O'Neil, Village Clerk, Point Edward.

PORT ARTHUR, City.—Shipbuilding yard, and sash and door factory started. Owns and operates waterworks, cost \$448,954; electric light plant, cost \$78,440; telephone system, cost \$143,353; power plant, cost \$303,663; electric railway, cost \$447,466. Good openings for agricultural implements works, plough factory, traction engine factory, automobile factory, boot and shoe factory, cast iron pipe factory, car wheel factory, flour mill, wagon factory, and wrought iron pipe factory. Number of buildings erected 223; cost \$1,066,056. Amount expended on permanent improvements \$619,372. Amount expended on sanitation \$12,855. Jas. McTeigue, City Clerk, Port Arthur.

PORT CARLING, V.—Number of buildings erected 6; cost \$6,000. Amount expended on permanent improvements \$593. Amount expended on sanitation \$136. F. D. Stubbs, Village Clerk, Port Carling.

PORT COLBORNE, V.—Cork products factory and flour mill started. Owns and operates waterworks; cost \$30,000. Good openings for various industries; two power supply companies, and transportation by land or water. Number of buildings erected 3; cost \$6,000. Amount expended on permanent improvements about \$2,000. Fr. D. Noble, Village Clerk, Port Colborne.

PORT DALHOUSIE, V.—Good openings for almost any kind of industry. Number of buildings erected 6; cost about \$3,500. Amount expended on permanent improvements \$327. J. M. A. Waugh, Village Clerk, Port Dalhousie.

PORT DOVER, V.—Implement factory started. Good openings for almost any kind of industry. Number of buildings erected 14; cost \$11,700. Amount expended on permanent improvements \$1,796. Amount expended on sanitation \$408. Jas. Sloan, Village Clerk, Port Dover.

PORT ELGIN, V.—Owns and operates waterworks; cost about \$40,000. Good openings for saw mill, canning factory, furniture factory, and other wood working industries. One new building erected; cost \$1,500. Amount expended on permanent improvements \$500. D. Geddes, Village Clerk, Port Elgin.

PORT HOPE, Tn.—Steel wire door mats factory started. Owns and operates waterworks; cost \$115,000. Good opening for iron and brass industries. Number of buildings erected 14; cost \$45,000. Amount expended on permanent improvements about \$15,000. J. W. Sanders, Town Clerk, Port Hope.

PORT PERRY, V.—Owns and operates waterworks, cost \$6,000; electric light plant \$17,500. No new building erected. Amount expended on permanent improvements \$1,300. W. H. Harris, Village Clerk, Port Perry.

PORT ROWAN, V.—Good opening for any kind of factory using natural gas.

Number of buildings erected 8; cost about \$5,000. W. A. Mabey, Village Clerk, Port Rowan.

PORT STANLEY, V.—Good openings for any kind of industry requiring shipping facilities. Number of buildings erected 27; cost about \$12,000. Amount expended on permanent improvements \$1,371. Amount expended on sanitation about \$170. Jas. Gough, Village Clerk, Port Stanley.

PORTLAND, Tp.—Number of buildings erected 6; cost \$9,000. Amount expended on permanent improvements, \$3,291. Thos. A. Kerr, Township Clerk, Harrowsmith.

PORTSMOUTH, V.—Openings for various industries; harbour and pier. No new buildings erected. Amount expended on permanent improvements \$540. Amount expended on sanitation \$25. J. W. Henstridge, Village Clerk, Portsmouth.

POWASSAN, Tn.—Good opening for wooden ware factories of any kind. Number of buildings erected 4; cost \$5,000. Amount expended on permanent improvements \$700. Amount expended on sanitation \$100. L. G. Phillips, Town Clerk, Powassan.

PRESCOTT, Tn.—Owns and operates waterworks, value \$60,000; electric light plant, value \$22,250. Good openings for any kind of industries. No new buildings erected. Amount expended on permanent improvements \$22,000. Amount expended on sanitation about \$50. Geo. Rook, Town Clerk, Prescott.

PRESTON, Tn.—Shoe factory started. Owns and operates waterworks, cost \$87,000; electric light plant \$58,000. Openings for all kinds of industries. Number of buildings erected 75; cost \$200,000. Amount expended on sanitation \$21,000. H. C. Edgar, Town Clerk, Preston.

PRINCE, Tp.—Number of buildings erected 3; cost \$4,000. Amount expended on permanent improvements \$1,100. W. H. Wilson, Township Clerk, Steelton.

PUSLINCH, Tp.—Number of buildings erected 10; cost \$18,500. Amount expended on permanent improvements \$4,476, besides statute labor. Amount expended on sanitation \$106. Geo. J. Meldrum, Township Clerk, Morriston.

RADCLIFFE, Tp.—Shoemaker started. No new buildings erected. Bridge replanked by Government. J. E. H. Miller, Township Clerk, Combermere.

RAGLAN, Tp.—No new buildings erected. Amount expended on permanent improvements \$599, including Government. Amount expended on sanitation \$64. Chr. F. Schmelzle, Township Clerk, Jewellville.

RAINHAM, Tp.—Number of buildings erected about 7; cost about \$5,400. Amount expended on permanent improvements \$375. L. F. Culver, Township Clerk, Rainham.

RAINY RIVER, Tn.—Additions to machine shop and stave factory. Owns and operates waterworks, cost \$33,000. Good openings for sash and door factory, box factory, excelsior factory, flour mill, etc. Number of buildings erected 25; cost \$58,000. Amount expended on permanent improvements \$2,400. Amount expended on sanitation \$14,000. J. H. Wilson, Town Clerk, Rainy River.

RALEIGH, Tp.—Good opening for beet sugar factory. Number of buildings erected 20; cost \$20,000. Amount expended on permanent improvements \$3,000. Amount expended on sanitation \$300. A. E. Robinson, Township Clerk, Buxton.

RAMA, Tp.—Good opening for building stone quarries. Number of buildings erected about 15; cost about \$11,000. Amount expended on permanent improvements \$3,000. W. M. Shields, Township Clerk, O'Connell.

RAMSAY, Tp.—Amount expended on permanent improvements \$2,500. T. A. Thompson, Township Clerk, Almonte.

RATTER AND DUNNETT, Tp.—Amount expended on permanent improvements \$1,892. Amount expended on sanitation \$25. Emile Langlois, Township Clerk, Warren.

RAWDON, Tp.—Good openings for various industries, with electric power available. Number of buildings erected 4; cost about \$8,000. Amount expended on permanent improvements about \$600 grants beside about 1,200 days' statute labour. Amount expended on sanitation \$69. W. F. Bateman, Township Clerk, Spring Brook.

REACH, Tp.—Number of buildings erected 4; cost \$5,000. Amount expended on permanent improvements \$1,500. Amount expended on sanitation \$44. W. F. Dobson, Township Clerk, Manchester.

RENFREW, Tn.—Scale factory started. Owns and operates waterworks; cost \$121,235. Good openings for factories. Number of buildings erected about 25 or 30; about \$70,000 increase in assessment. Amount expended on permanent improvements about \$4,000. Amount expended on sanitation about \$600. A. T. Lawson, Town Clerk, Renfrew.

RICHARDS, Tp.—See Hagarty and Richards Tps.

RICHMOND, Tp.—Number of buildings erected 6; cost about \$3,000. Amount expended on sanitation \$35. Abram Winters, Township Clerk, Selby.

RICHMOND, W., V.—Grist mill started. Good opening for saw mill, flour mill, and blacksmith shop. Number of buildings erected 2; cost \$2,600. Amount expended on permanent improvements \$1,440. John Kielby, Village Clerk, Richmond West.

RICHMOND HILL, V.—Number of houses erected 4; cost about \$5,000. Amount expended on permanent improvements \$575. A. J. Hume, Village Clerk, Richmond Hill.

RIDGETOWN, Tn.—Good openings for canning factory and manufacturing industries. No new buildings erected. Amount expended on permanent improvements \$2,000. Amount expended on sanitation \$150. D. Cochrane, Town Clerk, Ridgetown.

RIDOUT, Tp.—See McLean and Ridout Tps.

ROCHESTER, Tp.—Brick and tile yard started. Owns and operates telephone system; cost \$11,000. Good openings for cream and milk condensing, cheese and butter factory. Number of buildings erected 5; cost about \$4,500. Amount expended on permanent improvements \$25,100. Amount expended on sanitation \$40. M. N. Mousseau, Township Clerk, Woodslee.

ROCKLAND, Tn.—Mica works started. Good opening for brick yard. Number of buildings erected 11; cost about \$9,000. Amount expended on permanent improvements about \$1,800. Amount expended on sanitation about \$60. James N. Lagrois, Town Clerk, Rockland.

RODDICK, Tp.—See Alberton and Roddick Tps.

RODNEY, V.—Good openings for foundry and furniture factory. One new building erected. \$6,000. Amount expended on sanitation \$25. J. D. Shaw, Village Clerk, Rodney.

ROLPH, BUCHANAN AND WYLIE, Tps.—Number of buildings erected 7; cost about \$3,300. Amount expended on permanent improvements \$95. Florence McCarthy, Township Clerk, Wylie.

ROMNEY, Tp.—Good opening for canning factory. Number of buildings erected about 10; cost about \$10,000. Amount expended on permanent improve-

ments about \$5,000. Amount expended on sanitation about \$50. J. W. Kennedy, Township Clerk, Wheatley.

ROSS, Tp.—Small saw mill started. Number of buildings erected about 10; cost about \$5,000. Amount expended on permanent improvements \$2,000. Amount expended on sanitation \$20. P. R. Pounder, Township Clerk, Forester's Falls.

ROXBOROUGH, Tp.—Amount expended on permanent improvements about \$900. D. A. McDiarmid, Township Clerk, Sandringham.

RUSSELL, Tp.—Shale products factory started. Good openings for brick yard, planing mill, sash and door factory, pork packer's establishment and cold storage plant. Number of buildings erected 30; cost about \$40,000. Amount expended on permanent improvements \$5,000. W. J. Lowrie, Township Clerk, Russell.

RYDE, Tp.—Number of buildings erected 3; cost \$1,500. Amount expended on permanent improvements \$300. Wm. Lowe, Township Clerk, Barkway.

RYERSON, Tp.—Sawmill started. Robt. Bradley, Township Clerk, Burk's Falls.

ST. CATHARINES, C.—Automobile factory, chain factory, two canning and jam factories started; electric supplies and motor factory enlarged. Owns and operates waterworks; cost \$340,000; owns one-third of gas works, \$50,000. Good openings for any industries requiring electric or water power, natural gas, and shipping facilities by rail or water. Number of buildings erected 137; cost \$170,175. Amount expended on permanent improvements \$10,200. Amount expended on sanitation \$20,000. J. Albert Pay, City Clerk, St. Catharines.

ST. JOSEPH, Tp.—Number of buildings erected 12; cost \$5,500. Amount expended on permanent improvements about \$2,000. H. M. Ross, Township Clerk, Richard's Landing.

ST. MARY'S Tn.—Pin factory started. Owns and operates waterworks and electric light plant; cost \$93,452. Good opening for knitting factory and other industries. Number of buildings erected 10; cost \$9,400. Amount expended on permanent improvements \$11,500. Thos. M. Clark, Town Clerk, St. Mary's.

ST. THOMAS, C.—Knitting factory, shoe factory, and stove and furnace factory started. Owns and operates waterworks, value \$269,000; street railway, value \$85,000; gas and electric light plant, value \$250,000. Good openings for iron and other industries. Number of buildings erected 147; cost \$286,650. Amount expended on permanent improvements \$39,000. Amount expended on sanitation \$5,000. W. B. Doherty, City Clerk, St. Thomas.

ST. VINCENT, Tp.—Good opening for canning industries. Geo. G. Albery, Township Clerk, Meaford.

SALTER, May and Harrow, Tps.—Good openings for industries of various kinds, with water power running to waste. Number of buildings erected 30; cost about \$6,000. Amount expended on permanent improvements about \$1,200, by Government. Oscar Cole, Township Clerk, Massey.

SALTFLEET, Tp.—Co-operative fruit company started. Good opening for basket and box factories. Number of buildings erected about 30; cost about \$30,000. Amount expended on permanent improvements about \$3,000. Amount expended on sanitation \$263. Erland Lee, Township Clerk, Stoney Creek.

SANDFIELD, Tp.—Good openings for planing and lath mills. Amount expended on permanent improvements \$27. Thad. W. Thompson, Township Clerk, Big Lake.

SANDWICH, Tn.—Soda ash plant started. Good opening for manufacture of salt and its products, and other industries. Number of buildings erected about 17; cost about \$25,000. Amount expended on permanent improvements \$2,631. Amount expended on sanitation \$10,904. E. R. North, Town Clerk, Sandwich.

SANDWICH E., Tp.—Automobile parts factory started. Number of buildings erected about 40; cost about \$78,000. Amount expended on permanent improvements \$15,922. Maurice Renaud, Township Clerk, Tecumseh.

SANDWICH S., Tp.—Amount expended on permanent improvements about \$6,000. John Moynahan, Township Clerk, Windsor.

SANDWICH W., Tp.—Good opening for steel plant. Number of buildings erected 17; cost \$16,000. Amount expended on permanent improvements \$8,300. Amount expended on sanitation \$5,000. Ernest Bondy, Township Clerk, Canard River.

SARAWAK, Tp.—Number of buildings erected 3; cost about \$3,500. Amount expended on permanent improvements \$288. Amount expended on sanitation about \$35. Wm. Morton, Township Clerk, East Linton.

SARNIA, Tn.—Salt works, ornamental wire fence factory, pottery, lubricate factory, creamery butter factory and fruit and vegetable cannery started. Owns and operates waterworks; cost \$206,750. Good openings for any class of industry. Number of buildings erected 20; cost about \$40,000. Amount expended on permanent improvements, \$7,022. Amount expended on sanitation \$22,634. J. D. Stewart, Town Clerk, Sarnia.

SARNIA, Tp.—Good opening for beet sugar factory, cheese and butter factory. Number of buildings erected 10; cost \$10,000. Amount expended on permanent improvements \$6,000. H. D. Kewley, Township Clerk, Sarnia.

SAUGEEN, Tp.—Number of buildings erected 3; cost \$3,000. Amount expended on permanent improvements \$1,100. Fred. W. Elliott, Township Clerk, Port Elgin.

SAULT STE. MARIE, Tn.—Steel plant, sash and door factory and cabinet factory started. Good opening for chair factory and other woodenware industries. Number of buildings erected 300; cost \$500,000. Amount expended on permanent improvements \$28,773. Amount expended on sanitation \$7,731. C. J. Pim, Town Clerk, Sault Ste. Marie.

SCARBOROUGH, Tp.—Amount expended on permanent improvements, \$10,050. Thos. Crawford, Township Clerk, Agincourt.

SCHREIBER, Tp.—Number of buildings erected 9; cost about \$7,000. Amount expended on permanent improvements \$704. Amount expended on sanitation \$14. Geo. A. Evans, Township Clerk, Schreiber.

SCOTT, Tp.—Number of buildings erected 7; cost \$9,000. Amount expended on permanent improvements \$2,618. Amount expended on sanitation \$67. Allan Gray, Township Clerk, Uxbridge.

SCUGOG, Tp.—Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements \$2.00. Thos. Graham, Township Clerk, Port Perry.

SEAFORTH, Tn.—Owns and operates waterworks; cost \$13,000. Good opening for linen or woollen mill. Number of buildings erected 4; cost \$8,000. Amount expended on sanitation \$770. J. A. Wilson, Town Clerk, Seaforth.

SEBASTOPOL, Tp.—Good openings for sawmill and creamery. No new buildings erected. Amount expended on permanent improvements about \$566, including \$400 by Government. C. Walther, Township Clerk, Vanbrugh.

SENECA, Tp.—Sash and door factory and planing mill started. Good opening for blacksmith shop. Number of buildings erected 4; cost about \$5,000. Amount expended on permanent improvements \$500. Amount expended on sanitation \$60. N. H. Wickett, Township Clerk, York.

SEYMOUR, Tp.—Pulp mill started. Good openings for various industries.

Amount expended on permanent improvements \$4,024. J. B. Ferris, Township Clerk, Campbellford.

SHEFFIELD, Tp.—Good openings for flour mill and woollen mill. Amount expended on permanent improvements \$2,446. Jas. Aylesworth, Township Clerk, Tamworth.

SHELBURNE, V.—Owns and operates waterworks; cost \$26,000. Number of buildings erected 5; cost \$20,000. Amount expended on permanent improvements \$900. N. B. Allin, Village Clerk, Shelburne.

SHERBORNE, etc., Tp.—Good opening for railroad. No new buildings erected. Amount expended on permanent improvements \$320 by Government. W. C. Sparks, Township Clerk, Dorset.

SHERBROOKE, Tp.—Good opening for various industries, with fine harbour. Number of buildings erected 3; cost \$1,700. Amount expended on permanent improvements \$275. L. McCallum, Township Clerk, Stromness.

SHERBROOKE N., Tp.—See Dalhousie and Sherbrooke N., Tps.

SHERBROOKE, S., Tp.—Good opening for spinning and weaving mill. Number of buildings erected 20; cost \$6,000. Amount expended on permanent improvements \$1,500. Henry Rigney, Township Clerk, Maberley.

SHERWOOD, JONES AND BURNS, Tps.—Good opening for pulp mill. Number of buildings erected 7; cost about \$3,000. Amount expended on permanent improvements \$167. Amount expended on sanitation \$737. Jas. Murray, Township Clerk, Barry's Bay.

SHUNIAH, Tp.—Number of buildings erected 3; cost \$4,000. H. A. McKibbin, Township Clerk, Port Arthur.

SIDNEY, Tp.—Good opening for industries requiring waterpower. Number of buildings erected about 10; cost about \$5,000. Amount expended on permanent improvements \$1,200. Amount expended on sanitation \$750. A. M. Chapman, Township Clerk, Belleville.

SIMCOE, Tn.—Fertilizing works, evaporating plant and mustard and pickles factory started. Owns and operates waterworks; cost \$78,000. Good openings for canning and preserving fruit and woodworking industries. Number of buildings erected 19; cost \$30,000. Amount expended on permanent improvements about \$500. W. C. McCall, Town Clerk, Simcoe.

SMITH, Tp.—Number of buildings erected about 6; cost about \$5,500. Amount expended on permanent improvements \$3,657. Amount expended on sanitation \$172. J. W. Kelly, Township Clerk, Bridgenorth.

SMITH'S FALLS, Tn.—Owns and operates waterworks; cost about \$175,000. Good openings for almost any industry. Number of buildings erected 57; cost about \$143,000. Amount expended on permanent improvements \$24,000. Amount expended on sanitation \$7,000. J. A. Lewis, Town Clerk, Smith's Falls.

SNOWDON, Tp.—No new buildings erected. Amount expended on permanent improvements \$347. H. J. Scott, Township Clerk, Gelert.

SOMBRA, Tp.—Good opening for brick and tile yard, creamery, cheese factory and electric railway. Amount expended on permanent improvements \$4,589. Amount expended on sanitation \$74. W. H. McGhee, Township Clerk, Wilkesport.

SOMERVILLE, Tp.—Good opening for lime business. Amount expended on permanent improvements \$1,415. Sam. Sudaby, Township Clerk, Burnt River.

SOPHIASBURG, Tp.—Number of buildings erected 8; cost \$5,100. Amount expended on permanent improvements \$423.

SOUTH RIVER, V.—Sawmill and electric light plant started. Good openings

for woodworking factories and industries requiring electric power. Number of buildings erected 6; cost about \$2,500. Amount expended on permanent improvements \$200. H. O. Boorse, Village Clerk, South River.

SOUTHAMPTON, Tn.—Large increases in furniture factories. Owns and operates waterworks; cost \$33,870. Good openings for upholstery factory, refrigerator factory and woodworking industries. Number of buildings erected 6; cost \$15,000. Amount expended on permanent improvements \$596. Amount expended on sanitation \$111. J. C. Eckford, Town Clerk, Southampton.

SOUTHWOLD, Tp.—No new buildings erected. Amount expended on permanent improvements \$3,980. J. C. McLennan, Township Clerk, Fingal.

SPRINGER, Tp.—Number of buildings erected about 20; cost about \$6,000. Amount expended on permanent improvements \$3,300. Onesime Lafrance, Township Clerk, Sturgeon Falls.

SPRINGFIELD, V.—Good opening for evaporating plant. No new buildings erected. Amount expended on permanent improvements \$153. J. B. Lucas, Village Clerk, Springfield.

STAFFORD, Tp.—Number of buildings erected 4; cost \$6,000. Amount expended on permanent improvements \$1,400. John Kidd, Township Clerk, Micksburg.

STAMFORD, Tp.—Number of buildings erected 50; cost \$100,000. Amount expended on permanent improvements \$5,000. C. F. Mowrey, Township Clerk, South End.

STANHOPE, Tp.—Good waterpower for industries. One new building erected; cost \$340. Amount expended on permanent improvements \$113. Wm. Cooper, Township Clerk, Boskung.

STANLEY, Tp.—Good opening for creamery or cheese factory. Number of buildings erected 4 or 5; cost about \$4,000. Amount expended on permanent improvements about \$6,000. Amount expended on sanitation \$200. J. E. Harnwell, Township Clerk, Varna.

STAYNER, Tn.—Owns and operates waterworks; cost \$24,000. Openings for various industries. One new building erected; cost about \$2,500. Amount expended on permanent improvements about \$400. John Hood, Town Clerk, Stayner.

STEELTON, Tn.—Coke ovens and iron furnaces started. Owns and operates waterworks; cost \$33,000. Good openings for furniture factory, smelter, brick and tile yard, wagon shop and shipyard. Number of buildings erected about 60; cost \$2,060,000. Amount expended on sanitation \$31,100. J. Robinson, Town Clerk, Steelton.

STEPHEN, Tp.—Number of buildings erected about 20; cost about \$11,000. Amount expended on permanent improvements about \$6,520. Henry Eilber, Township Clerk, Crediton.

STEPHENSON, Tp.—Good openings for woodenware industries. Amount expended on permanent improvements \$1,811. Daniel Bain, Township Clerk, Utterson.

STIRLING, V.—Chopping mill, ice cream factory and apple evaporator started. Owns and operates electric light and power plant; cost \$12,000. Good openings for canning factory, sash and door factory, button factory, stove works, foundry, machine shop and brick and tile yard. Number of buildings erected 5; cost \$10,000. Amount expended on permanent improvements \$1,000. Jas. Currie, Village Clerk, Stirling.

STISTED, Tp.—Sawmill started. Number of buildings erected 2; cost \$4,000. Amount expended on permanent improvements \$1,300. Amount expended on sanitation \$2. Wm. Quinn, Township Clerk, Yearley.

STORRINGTON, Tp.—Number of buildings erected 5; cost about \$1,000. Amount expended on permanent improvements \$2,500. H. J. Morland, Township Clerk, Sunbury.

STOUFFVILLE, V.—Owns and operates waterworks; cost \$25,000. Good opening for foundry, etc. Number of buildings erected 2; cost \$3,500. Amount expended on permanent improvements \$143. J. Urquhart, Village Clerk, Stouffville.

STRATFORD, C.—Owns and operates waterworks; cost \$204,000; electric light plant \$129,000. Good openings for stove factory, metal bedstead factory, boot and shoe factory, waggon factory, sewing machine factory, soap factory, nail factory, locks and builders' hardware factory, brass factory and rubber factory. Number of buildings erected 100; cost \$175,000. Amount expended on permanent improvements \$46,836. Amount expended on sanitation \$11,837. R. R. Lang, City Clerk, Stratford.

STRATHROY, Tn.—Art novelty establishment started. Owns and operates waterworks and electric light plant; cost about \$60,000. Number of buildings erected 4; cost \$10,700. Amount expended on permanent improvements \$1,800. Amount expended on sanitation \$500. F. W. Atkinson, Acting Town Clerk, Strathroy.

STREETSVILLE, V.—Owns and operates electric light plant; cost \$25,000. Good opening for brickyard. Amount expended on permanent improvements \$1,600. S. H. Smith, M.D., Village Clerk, Streetsville.

STRONG, Tp.—Sawmill started. Good openings for grist mill, furniture factory, smallwares factory and summer resort cottages. Number of buildings erected 3; cost \$2,000. Amount expended on permanent improvements \$1,000. Amount expended on sanitation \$15. Arthur M. Church, Township Clerk, Sundridge.

STURGEON FALLS, Tn.—Owns and operates waterworks; cost \$46,812. Good openings for grist mill, furniture factory, sash and door factory, woollen mill, etc. Number of buildings erected 2; cost \$12,700. Amount expended on permanent improvements \$4,996. Amount expended on sanitation \$779. J. D. Cockburn, Town Clerk, Sturgeon Falls.

STURGEON POINT, V.—Number of buildings erected 3; cost \$3,000. Amount expended on permanent improvements \$500. Amount expended on sanitation \$150. G. H. Hopkins, Village Clerk, Lindsay.

SUDBURY, Tn.—Flour mill and two planing mills started. Owns and operates waterworks and electric light plant \$162,833. Good openings for various industries. Number of buildings erected 97; cost \$410,000. Amount expended on permanent improvements \$33,833. Amount expended on sanitation \$1,558. Geo. Elliott, Town Clerk, Sudbury.

SULLIVAN, Tp.—Number of buildings erected 6; cost about \$8,000. Amount expended on permanent improvements \$3,007. Alex. Stephen, Township Clerk, Desboro.

SUNDRIDGE, V.—Good openings for furniture factory, veneer factory, stave mill, planing mill and other woodworking industries. No new buildings erected. Amount expended on permanent improvements \$100. John Harper, Village Clerk, Sundridge.

SUNNIDALE, Tp.—Good openings for cheese factory, creamery and cement works. Number of buildings erected about 16; cost about \$15,000. Amount expended on permanent improvements \$3,200. Amount expended on sanitation \$60. Thos. F. Burrows, Township Clerk, Stayner.

SUTTON, V.—Good openings for cheese factory, creamery, woollen mill and

fruit cannery. Number of buildings erected 8; cost \$11,000. Amount expended on permanent improvements about \$550. Amount expended on sanitation \$25. T. G. Tremayne, Village Clerk, Sutton West.

SYDENHAM, Tp.—Number of buildings erected 6; \$4,500. Amount expended on permanent improvements \$4,283. Jas. Cannon, Township Clerk, Annan.

TARA, V.—Good openings for industries of almost any description. No new buildings erected. Amount expended on permanent improvements \$100. Amount expended on sanitation \$150. W. J. Taylor, Village Clerk, Tara.

TARENTORUS, Tp.—Good opening for cement block factory. Number of buildings erected 21; cost \$5,500. Amount expended on permanent improvements \$4,562. Ben. R. McMullin, Township Clerk, Sault Ste. Marie.

TAVISTOCK, V.—Good openings for various industries. Number of buildings erected 5; cost \$6,500. Amount expended on permanent improvements \$2,500. J. G. Field, Village Clerk, Tavistock.

TAY, Tp.—Grain elevator started. Good openings for all kinds of manufacturing. Amount expended on permanent improvements \$2,990. T. W. Brown, Township Clerk, Victoria Harbour.

TECUMSETH, Tp.—Number buildings erected about 10; cost about \$10,000. Amount expended on permanent improvements about \$3,000. Wm. Lilly, Township Clerk, Beeton.

TEESWATER, V.—Owns and operates waterworks; cost about \$17,000. Good opening for woodworking industries. Number of buildings erected 3; cost about \$5,000. Amount expended on permanent improvements \$175. Amount expended on sanitation \$45. John Farquharson, Village Clerk, Teeswater.

TEHKUMMAH, Tp.—Good opening for brickyard. Number of buildings erected 2; cost about \$2,000. Amount expended on permanent improvements \$1,200. Jas. E. Hopkins, Township Clerk, Tehkummah.

THAMESVILLE, V.—Owns and operates waterworks; cost \$11,000; electric light plant \$6,500. Good openings for creamery, pork packing establishment, etc. Amount expended on permanent improvements \$10,500. W. J. Cryderman, Village Clerk, Thamesville.

THEDFORD, V.—Good opening for fruit cannery. One new building erected; cost \$800. Amount expended on permanent improvements \$750. Amount expended on sanitation \$15. Wm. Brooks, Village Clerk, Thedford.

THESSALON, Tn.—Owns and operates waterworks; cost \$26,000; electric light plant \$12,000. Number of buildings erected about 20; cost about \$15,000. Amount expended on permanent improvements \$1,000. C. A. Batson, Town Clerk, Thessalon.

THESSALON, Tp.—Good opening for furniture factory. Number of buildings erected 6; cost \$8,000. Amount expended on permanent improvements \$764. Theo. E. Clinton, Township Clerk, Thessalon.

THOMPSON, Tp.—Good openings for box factory and blacksmith shop. Number of buildings erected 2; cost \$700. Amount expended on permanent improvements \$400. Archibald Graham, Township Clerk, Dean Lake.

THORAH, Tp.—Good opening for woodworking industries. Number of buildings erected 4; cost \$4,700. Amount expended on permanent improvements \$2,922. Amount expended on sanitation \$33. John McArthur, Township Clerk, Beaverton.

THORNBURY, Tn.—Good opening for woodworking factories. Number of buildings erected 3; cost \$7,000. Amount expended on permanent improvements \$694. Edw. Rorke, Town Clerk, Thornbury.

THOROLD, Tn.—Pulp mill and pulp board mill started. Owns and operates

waterworks, cost \$90,000; electric light plant; cost \$25,000. Good openings for every kind of industry, with electric power and transportation facilities by land and water. Number of buildings erected about 5; cost about \$10,500. Amount expended on permanent improvements \$1,000. Amount expended on sanitation \$3,575. D. J. C. Munro, Town Clerk, Thorold.

THOROLD, Tp.—Good opening for canning factory. Number of buildings erected about 7; cost about \$6,300. Amount expended on permanent improvements \$1,800. Amount expended on sanitation \$32. John A. Clark, Township Clerk, Fonthill.

THURLOW, Tp.—Good opening for cement mills and canneries. Number of buildings erected about 3; cost about \$3,000. Amount expended on permanent improvements about \$3,100. C. A. Callery, Township Clerk, Canifton.

TILBURY, Tn.—Partly owns and operates waterworks system; value \$17,000. Good opening for brick and tile yard, glass factory, pork packing plant, creamery, machine shop and basket factory. Number of buildings erected 3; cost \$1,200. Amount expended on sanitation \$1,615. A. A. Wilson, Town Clerk, Tilbury.

TILBURY N., Tp.—Good opening for brick and tile yard. Number of buildings erected about 8; cost about \$10,000. Amount expended on permanent improvements \$500. J. A. Tremblay, Township Clerk, Tilbury.

TILBURY W., Tp.—Good openings for cannery, flax mill and pork packing. Number of buildings erected 27; cost \$16,000. Amount expended on permanent improvements \$2,000. Amount expended on sanitation \$50. S. T. Anderson, Township Clerk, Comber.

TILLSONBURG, Tn.—Owns and operates hydro-electric light and power plant; cost \$25,000. Good openings for various industries, with electric power, natural gas and four railways. Number of buildings erected 10; cost \$15,000. Amount expended on permanent improvements \$6,000. Amount expended on sanitation \$4,200. Alf. E. Raynes, Town Clerk, Tillsonburg.

TINY, Tp.—Number of buildings erected 10; cost about \$8,000. Amount expended on permanent improvements \$2,000. M. Beaudoin, Township Clerk, Lafontaine.

TIVERTON, V.—Good opening for various industries. No new buildings erected. Amount expended on permanent improvements \$200. R. N. Blair, Village Clerk, Tiverton.

TORBOLTON, Tp.—Good opening for brick and tile yard. D. B. Maclaren, Township Clerk, Dirleton.

TORONTO, C.—Auto-press factory, gum factory, machinery factory, paper factory, drug factory, etc., started. Owns and operates waterworks; cost about \$8,500,000; electric light plant (East Toronto); \$40,000. Openings for almost any industry. Number of buildings erected 8,499; cost \$21,127,783. Amount expended on permanent improvements \$1,289,848. Amount expended on sanitation \$699,922. W. A. Littlejohn, City Clerk, Toronto.

TORONTO, Tp.—Good opening for many industries. Number of buildings erected 12; cost \$80,000. Amount expended on permanent improvements \$28,346. Amount expended on sanitation \$200. C. H. Gill, Township Clerk, Dixie.

TORONTO GORE, Tp.—Number of buildings erected 7; cost \$15,000. Amount expended on permanent improvements \$4,200. N. Harrison, Township Clerk, Castlemore.

TORONTO N., Tn.—Willow furniture factory started. Owns and operates waterworks; cost \$233,289; electric light line \$1,200. Good openings for various indus-

tries requiring electric power, etc. Number of buildings erected 216; cost \$254,404. Amount expended on permanent improvements \$42,307. Amount expended on sanitation \$390. W. C. Norman, Town Clerk, Eglinton.

TOSSORONTIO, Tp.—Number of buildings erected about 6; cost about \$8,000. Amount expended on permanent improvements \$1,000. Thomas Irwin, Township Clerk, Lisle.

TOTTENHAM, V.—Owns and operates electric light plant; cost \$600. Good opening for foundry and machine shop. Number of buildings erected 2; cost \$2,000. Amount expended on permanent improvements \$300. R. T. McCabe, Village Clerk, Tottenham.

TOWNSEND, Tp.—Good opening for tile and brick yard. Number of buildings erected 10; cost \$8,000. Amount expended on permanent improvements \$3,054. Amount expended on sanitation \$194. Jas. Ross, Township Clerk, Waterford.

TRAFALGAR, Tp.—Good opening for brickyard. Number of buildings erected 18; cost \$24,000. Amount expended on permanent improvements \$6,500. Chas. Hall, Township Clerk, Trafalgar.

TRENTON, Tn.—Good opening for any kind of industry. Number of buildings about 30; cost about \$50,000. Amount expended on permanent improvements \$4,000. Amount expended on sanitation \$7,500. G. W. Ostrom, Town Clerk, Trenton.

TUCKERSMITH, Tp.—Good opening for cheese and butter factories. Number of buildings erected 3; cost \$5,500. Amount expended on permanent improvements \$3,000. D. F. McGregor, Township Clerk, Seaforth.

TUDOR AND CASHEL, Tps.—Good openings for mining. No new buildings erected: amount expended on permanent improvements \$1,611. Wm. Glennie, Township Clerk, Millbridge.

TURNBERRY, Tp.—Openings for harness maker, waggon maker and blacksmith. Number of buildings erected 15; cost \$2,000. Amount expended on permanent improvements \$5,500. Amount expended on sanitation \$66. John Burgess, Township Clerk, Bluevale.

TWEED, V.—Openings for any industry. Number of buildings erected about 4; cost about \$4,000. Amount expended on permanent improvements \$600. P. T. Bowlby, Village Clerk, Tweed.

TYENDINGA, Tp.—One building erected; cost about \$1,500. Amount expended on permanent improvements \$1,581. P. Shaughnessy, Township Clerk, Melrose.

USBORNE, Tp.—Good opening for butter factory. Number of buildings erected 3; cost \$9,500. Amount expended on permanent improvements \$3,875, besides 3,200 days statute labour. Amount expended on sanitation \$17. Francis Morley, Township Clerk, Whalen.

UXBRIDGE, Tn.—Good opening for piano or other factory. Number of buildings 3; cost about \$6,000. Amount expended on permanent improvements \$5,000. Amount expended on sanitation \$2,300. M. H. Crosby, Town Clerk, Uxbridge.

UXBRIDGE, Tp.—Number of buildings erected 10; cost \$6,000. Amount expended on permanent improvements \$1,581. Amount expended on sanitation \$54. Jos. H. Millard, Township Clerk, Altona.

VAN HORNE, Tp.—Two gold mines started. Good openings for gold mines. Number of buildings erected 3; cost about \$3,000. Amount expended on permanent improvements \$500. Amount expended on sanitation \$10. Thos. Marshall, Township Clerk, Dryden.

VANKLEEK HILL, Tn.—Good opening for carriage factory and fruit cannery. Number of buildings erected 6; cost about \$12,000. Amount expended on permanent improvements \$2,200. H. C. Jones, Town Clerk, Vankleek Hill.

VAUGHAN, Tp.—Good openings for almost any industry. Number of buildings erected about 20; cost about \$20,000. Amount expended on permanent improvements \$12,652. J. B. McLean, Township Clerk, Maple.

VERULAM, Tp.—Good openings for industries requiring electric power. Number of buildings erected 16; cost \$6,640. Amount expended on permanent improvements \$2,500. Geo. W. Taylor, Township Clerk, Bobcaygeon.

VESPRE, Tp.—Good opening for cement factory. Number of buildings erected about 20; cost about \$25,000. Amount expended on permanent improvements \$2,000. Amount expended on sanitation \$123. A. B. Coutts, Township Clerk, Barrie.

VIENNA, V.—Natural gas wells started. Good opening for any kind of industry. No new buildings erected. Amount expended on permanent improvements \$551. Sam. S. Clutton, Village Clerk, Vienna.

WAINFLEET, Tp.—Amount expended on permanent improvements \$5,783. Jos. Henderson, Jr., Township Clerk, Marshville.

WALKERTON, Tn.—Rope factory started. Owns and operates waterworks; cost \$15,000. Good openings for foundry, canning factory and evaporator and hosiery factory. Number of buildings erected 6; cost \$18,720. Amount expended on permanent improvements \$1,363. Amount expended on sanitation \$126. J. H. Scott, Town Clerk, Walkerton.

WALKERVILLE, Tn.—Stock foods factory, machine factory, automobile factory, two automobile parts factories, overall factory and hand cleaner factory started. Good openings for various industries. Number of buildings 53; cost \$210,000. Amount expended on permanent improvements \$6,000. Amount expended on sanitation \$41,900. Cecil H. Robinson, Town Clerk, Walkerville.

WALLACE, Tp.—Number of buildings erected about 20; cost about \$25,000. Amount expended on permanent improvements \$3,600. David Greer, Township Clerk, Brotherston.

WALLACEBURG, Tn.—Good openings for almost any kind of factory. Number of buildings erected 30; cost \$64,225. Amount expended on permanent improvements \$1,500. Amount expended on sanitation about \$1,000. H. E. Johnson, Town Clerk, Wallaceburg.

WALPOLE, Tp.—Good opening for cement factory and brickyard. Number of buildings erected 20; cost \$15,000. Amount expended on permanent improvements \$11,682, including statute labour. Amount expended on sanitation \$65.00. S. A. Thompson, Township Clerk, Nanticoke.

WALSINGHAM N., Tp.—Number of buildings erected 5; cost \$6,500. Amount expended on permanent improvements \$2,131. Amount expended on sanitation \$64. Edgar J. Hodson, Township Clerk, Langton.

WALSINGHAM S., Tp.—Number of buildings erected 3; cost \$2,500. J. W. Townsend, Township Clerk, Walsingham Centre.

WARDSVILLE, V.—Chopping mill started. Good openings for apple exaporator, woollen mill and planing mill. One new building erected \$1,400. Amount expended on permanent improvements about \$200. W. A. Mimna, Village Clerk, Wardsville.

WARWICK, Tp.—Amount expended on permanent improvements about \$2,500. Amount expended on sanitation \$21. N. Herbert, Township Clerk, Warwick.

WATERDOWN, V.—Chopping mill started. Good opening for gristing mill. Amount expended on permanent improvements \$1,615. Amount expended on sanitation \$40. J. C. Medlar, Village Clerk, Waterdown.

WATERFORD, V.—Flour and feed mill and shoemaker started. Number of buildings erected 5; cost \$6,000. Amount expended on permanent improvements \$737. Amount expended on sanitation \$132. Jas. Ross, Village Clerk, Waterford.

WATERLOO, Tp.—Number of buildings erected about 45; cost about \$30,000. Amount expended on permanent improvements \$3,000. Geo. A. Tilt, Township Clerk, Blair.

WATERS, Tp.—Brickyard started. No new buildings erected. Amount expended on permanent improvements \$736, including \$700 Government grant. P. G. Gaudrault, Township Clerk, Copper Cliff.

WATFORD, V.—Good opening for cannery. No new buildings erected. W. S. Fuller, Village Clerk, Watford.

WATT, Tp.—Number of buildings erected 16; cost \$3,500. Amount expended on permanent improvements \$798. Edw. Hamilton, Township Clerk, Raymond.

WAWANOSH E., Tp.—Number of buildings erected about 10; cost \$3,250. Amount expended on permanent improvements \$2,430. Alex. Porterfield, Township Clerk, Marnoch.

WAWANOSH W., Tp.—Number of buildings erected 10; cost \$6,255. Amount expended on permanent improvements \$1,500. W. S. McCrostie, Township Clerk, St. Helens.

WEBBWOOD, Tn.—Number of buildings erected 2; cost \$1,200. Amount expended on permanent improvements \$2,500. Amount expended on sanitation \$860. Thos. Brinsmead, Town Clerk, Webbwood.

WELLAND, Tn.—Tub factory, knitting factory and overalls factory started. Owns and operates waterworks; cost \$155,000. Good openings for all kinds of factories. Number of buildings erected 60; cost \$80,000. Amount expended on permanent improvements \$35,000. Amount expended on sanitation \$12,865. Geo. R. Boyd, Town Clerk, Welland.

WELLESLEY, Tp.—Number of buildings erected 14; cost \$11,050. Amount expended on permanent improvements \$4,000. Amount expended on sanitation \$135. P. F. Schummer, Township Clerk, St. Clements.

WELLINGTON, V.—Good openings for almost every industry except canning. Number of buildings erected 6; cost about \$13,000. Amount expended on permanent improvements about \$600. Amount expended on sanitation about \$150. E. A. Titus, Village Clerk, Wellington.

WEST LORNE, V.—Furniture factory and other woodworking industries. Number of buildings erected 10; cost \$12,000. Amount expended on permanent improvements \$1,000. Amount expended on sanitation about \$300. J. A. McKellup, Pro. Clerk, West Lorne.

WESTMEATH, Tp.—Number of buildings erected 9; cost \$5,800. Amount expended on permanent improvements \$3,228. Amount expended on sanitation \$36. Hugh S. Miller, Township Clerk, Beachburg.

WESTMINSTER, Tp.—Number of buildings erected 25; cost \$41,000. Amount expended on permanent improvements \$5,463. Amount expended on sanitation \$120. Geo. Riddell, Township Clerk, Odell.

WESTON, V.—Roman stone factory started. Owns and operates lighting system; cost about \$7,500. Good openings for factories. Number of buildings erected about 20; cost about \$25,000. Amount expended on permanent improvements \$1,170. J. H. Taylor, Village Clerk, Weston.

WESTPORT, V.—Plating factory started. Good openings for woodworking industries, with water power available. One new building erected; cost \$3,000. Amount expended on permanent improvements \$2,000. W. S. Ripley, Village Clerk, Westport.

WHITBY, Tn.—Owns and operates waterworks and electric light plant; cost \$82,000. Good openings for any industry. Number of buildings erected 3; cost about \$8,000. Amount expended on permanent improvements \$3,900. Jos. White, Town Clerk, Whitby.

WHITBY E., Tp.—Good opening for blacksmith. Number of buildings erected 6; cost \$5,000. Amount expended on permanent improvements \$3,500. Wm. Purves, Township Clerk, Columbus.

WHITCHURCH, Tp.—Number of buildings erected 12; cost about \$15,000. Amount expended on permanent improvements \$2,327. J. C. Lundy, Township Clerk, Newmarket.

WIARTON, Tn.—Owns and operates waterworks; value about \$40,000. Good openings for furniture factory, wood alcohol factory, etc. Number of buildings erected about 6; cost about \$4,500. Amount expended on sanitation \$1,000. W. J. Ferguson, Town Clerk, Wiarton.

WICKLOW, Tp.—See Bangor, Wicklow and McClure Tps.

WIDDIFIELD, Tp.—Number of buildings erected about 70; cost \$40,000. Amount expended on permanent improvements \$7,170. J. A. Carmichael, Township Clerk, North Bay.

WILLIAMS E., Tp.—Amount expended on permanent improvements \$1,900. D. A. Stewart, Township Clerk, Nairn.

WILLIAMS W., Tp.—Number of buildings erected 2; cost \$1,000. Amount expended on permanent improvements \$1,104. Wm. Dawson, Township Clerk, Parkhill.

WILLIAMSBURG, Tp.—Good openings for sash and door factory and apple barrel factory. Number of buildings erected 6; cost about \$9,000. Amount expended on permanent improvements \$1,056. Amount expended on sanitation \$21. Geo. Lane, Township Clerk, Bouck's Hill.

WILLOUGHBY, Tp.—Number of buildings erected 3; cost \$6,000. Amount expended on permanent improvements \$1,800. J. A. Plyley, Township Clerk, Chippawa.

WILMOT, Tp.—Good opening for foundry. Number of buildings erected about 19; cost about \$30,000. Amount expended on permanent improvements about \$5,000. Amount expended on sanitation \$500. F. Holwell, Township Clerk, Baden.

WINCHESTER, Tp.—Number of buildings erected 11; cost about \$14,000. Amount expended on permanent improvements \$6,376. Geo. Quart, Township Clerk, Winchester.

WINCHESTER, V.—Good openings for pork packing establishment, etc. One building erected; cost \$6,000. Amount expended on permanent improvements about \$300. Hugh McMaster, Village Clerk, Winchester.

WINDHAM, Tp.—Number of buildings erected 6; cost about \$7,000. Amount expended on permanent improvements \$1,100. J. T. Camfield, Township Clerk, Windham Centre.

WINDSOR, C.—Motor car factory, injector factory, blanket factory and shirt factory started. Owns and operates waterworks; cost \$300,000; street lighting plant \$10,000. Number of buildings erected 226; value \$100,000. Amount expended on permanent improvements \$31,612. Amount expended on sanitation \$10,850. Steph. Lusted, City Clerk, Windsor.

WINGHAM, Tn.—Owns and operates waterworks; value \$37,000; electric light plant \$30,000. Good openings for chair factory, clothing factory, biscuit factory, underwear factory and boot and shoe factory. Number of buildings erected 5; value about \$8,000. Amount expended on permanent improvements \$2,097. Amount expended on sanitation \$14,207. John F. Groves, Town Clerk, Wingham.

WOLFE ISLAND, Tp.—Number of buildings erected 4; cost \$1,600. Amount expended on permanent improvements \$20. Jas. Teavis, Township Clerk, Howe Island.

WOLFORD, Tp.—Number of buildings erected 3; cost \$1,300. Amount expended on permanent improvements \$830. David Lynch, Township Clerk, Jasper.

WOLLASTON, Tp.—Good openings for mining, stave and heading factory, and lath and shingle mill. Number of buildings erected 4; cost \$800. Amount expended on permanent improvements \$1,000. Alex. Miller, Township Clerk, Coe Hill.

WOOD, Tp.—See Medora and Wood Tps.

WOODBIDGE, V.—Good opening for large manufacturing concerns. One new building erected; cost \$2,500. Amount expended on permanent improvements about \$900. Edw. Brown, Village Clerk, Woodbridge.

WOODHOUSE, Tp.—Cleaning mill for farm seed started. Good opening for basket and box factory. Number of buildings erected 30; cost \$55,000. Amount expended on permanent improvements \$3,700. Amount expended on sanitation \$40. Frank Bowlby, Township Clerk, Simcoe.

WOODSTOCK, C.—Wood-jointing machine factory, textile factory and pneumatic hammer factory started. Owns and operates waterworks; cost \$213,000; electric light and power plant; cost \$90,000. Good opening for iron working and other industries. Number of buildings erected 12; cost about \$120,000. Amount expended on permanent improvements \$11,100. John Morrison, City Clerk, Woodstock.

WOODVILLE, V.—Owns small interest, \$110, in lighting plant. Good opening for all kinds of industries. No new buildings erected. Amount expended on permanent improvements \$3,000. J. C. Gilchrist, Village Clerk, Woodville.

WOOLWICH, Tp.—Number of buildings erected 11; cost \$20,000. Amount expended on permanent improvements \$4,378. W. J. Snider, Township Clerk, Conestogo.

WORTHINGTON AND BLUE Tps.—Saw and planing mill started. Number of buildings erected 3; cost \$1,800. Amount expended on permanent improvements \$2,089. H. Engebretson, Township Clerk, Sleeman.

WROXETER, V.—Owns and operates electric light plant; cost \$2,500. Good openings for planing mill and evaporator. One building erected; cost \$1,000. Amount expended on permanent improvements \$155. J. Brethauer, Village Clerk, Wroxeter.

WYLIE, Tp.—See Rolph, Buchanan and Wylie Tps.

WYOMING, V.—Good opening for cannery, basket factory and box factory. One building erected; cost \$150. Amount expended on permanent improvements \$710. H. G. Taylor, Village Clerk, Wyoming.

YARMOUTH, Tp.—Grist mill started. Number of buildings erected 11; cost about \$21,000. Amount expended on permanent improvements \$20,340. Amount expended on sanitation \$850. W. C. Caughell, Township Clerk, St. Thomas.

YONGE, FRONT, Tp.—Number of buildings erected 2; cost \$3,500. Amount expended on permanent improvements \$2,500. F. H. Mallory, Township Clerk, Mallorytown.

YONGE AND ESCOTT, REAR, Tps.—Saw and grinding mill started. No buildings erected. Amount expended on permanent improvements \$1,396. R. E. Cornell, Township Clerk, Athens.

YORK, Tp.—Building plaster factory started. Number of buildings erected 270; cost about \$160,000. Amount expended on permanent improvements \$18,445. Amount expended on sanitation \$4,933. W. A. Clarke, Township Clerk, 40 Jarvis St., Toronto.

ZONE, Tp.—Number of buildings erected 4; cost about \$4,500. Amount expended on sanitation \$25. Henry Osborne, Township Clerk, Dante.

ZORRA E., Tp.—Chopping mill started. Number of buildings erected about 100; cost about \$50,000. Amount expended on permanent improvements about \$10,000. Jas. Anderson, Township Clerk, Hickson.

ZORRA W., Tp.—Number of buildings erected about 10; cost about \$15,000. Amount expended on permanent improvements \$4,600. W. H. Sutherland, Township Clerk, Embro.

STATISTICS TABULATED.

The preceding returns by the municipal clerks, as far as statistics are concerned, have been tabulated as follows, thus giving a clear view of the expenditure on new buildings, permanent improvements and sanitation. The additional column, introduced three years ago, has been repeated, showing the public utilities owned and operated by the municipalities, with the capital thus invested.

MUNICIPAL STATISTICS.

C. city; Tn., town; V., village; Tp., township.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Acton, V.	15	20,000	2,300		10,000
Adelaide, Tp.			3,500	33	
Admaston, Tp.	3	2,400	800		
Adolphustown, Tp.			800		
Ailsa Craig, V.			800	120	
Alberton, Tp.	9	3,000	2,632		
Albion, Tp.	10	15,000	3,000		
Alexandria, Tn.	2	20,650	8,000	500	42,420
Alfred, Tp.	25	20,000	1,200		
Algoma S., Tp.	2	200	150		
Alice and Fraser, Tps.	5	3,000	800		
Alliston, Tn.	4	7,000	400	100	19,000
Almonte, Tn.			3,000	2,000	40,000
Alnwick, Tp.	3	2,000	2,000		
Alvinson, V.	2	1,400	1,132	205	
Amabel, Tp.	5	4,000	3,773		
Amaranth, Tp.	5	7,000	4,000		
Ameliasburg, Tp.	7	8,000	1,078	40	
Amherst Island, Tp.	2	1,600			
Amherstburg, Tn.	6	31,500		500	46,000
Ancaster, Tp.	100	50,000	1,441		
Anderson, Tp.	7	6,975	3,339		
Anson and Hindon, Tps.			150		
Arkona, V.			100	50	
Armour, Tp.	3	1,000	1,206	2	
Arnprior, Tn.	8	12,000	2,146	250	116,000
Arran, Tp.	1	1,200	2,999	64	
Artemesia, Tp.	5	20,000	1,350		
Arthur, Tp.	6	7,500	3,000		
Arthur, V.	2	2,500	2,300	35	
Ashfield, Tp.	40	20,000	3,061	30	
Assiginack, Tp.			1,700		
Athens, V.	1	1,000			
Athol, Tp.	6	5,600	1,800		
Atwood, Tp.	2	1,100	300		
Augusta, Tp.	18	10,000	4,200		
Aurora, Tn.	40	35,500	5,000	500	25,000
Aylmer, Tn.	12	20,000	4,000		60,000
Ayr, V.			300		
Bagot and Blythfield, Tps.			500		
Balfour, Tp.	3	1,500			
Bancroft, V.	2	2,000	500		
Bangor, Wicklow, &c., Tps.			400		

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new build-ings, erected during 1910.	Aggregate cost new buildings.	Spent on perma-nent improve-ments.	Spent on sanita-tion, including sewers.	Cost or value public utilities owned and oper-ated.
	No	\$	\$	\$	\$
Barrie, Tn.	40	65,000	15,000	15,500	207,847
Barrie, Tp.			22		
Barton, Tp.	50	50,000	19,242	259	
Bastard and Burgess, Tps.	2	7,000	802	43	
Bath, V.	2	12,000	350	15	225
Bathurst, Tp.	14	12,000	622	20	
Bayfield, V.	2	2,000	659		
Beamsville, V.	8	10,000	120		27,000
Beaverton, V.	2	18,000	418	20	
Beckwith, Tp.			1,800	25	
Bedford, Tp.	4	7,000	1,200		
Beeton, V.	2	1,000	600		19,500
Belle River, V.			300		
Belleville, C.	27	300,030	18,539	70,000	288,111
Belmont and Methuen, Tps.			1,200		
Bentinck, Tp.	15	10,000	3,190	28	
Berlin, Tn.	136	347,547	140,001	14,227	684,773
Bertie, Tp.	20	25,000	5,075	293	
Beverly, Tp.	7	20,000	3,151		
Bexley, Tp.	2	600	750		
Biddulph, Tp.			4,373	43	
Billings, Tp.			1,700		
Binbrook, Tp.	15	10,000	1,498		
Blandford, Tp.	15	4,000	1,855	122	
Blanshard, Tp.	10	10,000	2,000		
Blenheim, Tn.	3	5,000			12,500
Blenheim, Tp.	5	4,200	8,698		
Blezard, Tp.	3	1,000	1,435		
Blind River Tn.	11	12,500	2,249	95	
Bloomfield, V.	1	1,800	5,000		
Blyth, V.	2	4,000	600	50	4,300
Bobcaygeon, V.	5	4,925	1,086		25,000
Bolton, V.	3	5,000	900		
Bonfield, Tn.			500		
Bosanquet, Tp.	8	8,600	3,092		
Bothwell Tn.	2	1,800			11,100
Bowmanville, Tn.	1	20,000	25,000		16,000
Bracebridge, Tn.	6	7,400	4,000		163,000
Bradford, Tn.	2	6,000	1,500		
Brampton, Tn.	30	50,000	14,176	6,280	160,000
Brant, Tp.	13	21,603	3,259	218	
Brantford, C.	377	681,030	279,694	104,215	474,817
Brantford, Tp.	75	75,000	12,838	2,140	
Bridgeburg, Tn.	20	40,000	2,000	38,534	50,504
Brighton, Tp.	10	30,000	2,500	115	
Brighton, V.	3	5,000	1,200	500	
Brock, Tp.	8	12,000	8,276	248	
Brockville, Tn.	52	109,500	27,500	4,465	455,000
Bromley, Tp.	1	2,500	830		
Brooke, Tp.	4	10,000	2,000	34	
Brougham, Tp.			25		
Bruce, Tp.	10	5,100	3,568		
Bruce Mines, Tn.			4,000		
Brudenell and Lynedoch, Tps.			280		
Brunel Tp.	2	500	700		
Brussels, V.	1	5,000	300	400	
Bucke, Tp.	50	25,000	4,800	200	

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Burford, Tp.	60	40,000	11,000		
Burgess N., Tp.			80		
Burk's Falls, V.	3	7,900	583	10	37,000
Burlington, V.	20	50,000	1,500	800	50,000
Burpee, Tp.	1	1,200	600		
Cache Bay, Tn.	3	2,000	885	27	
Caistor, Tp.	8	4,000	1,500		
Caldwell, Tp.	15	12,000	3,000	1,000	
Caledon, Tp.	8	10,000	8,000		
Caledonia, Tp.	6	6,000	1,000		
Caledonia, V.	6	14,000	1,250	25	
Cambridge, Tp.	4	5,200	2,000		
Camden, Tp.	7	14,000	2,000		
Camden E., Tp.	3	6,000	1,000	100	
Cameron, Tp.	1	700	30		
Canboro, Tp.			1,972	29	
Cannington, V.	1	1,700	500		
Caradoc, Tp.	6	5,000	5,000	45	
Carden, Tp.	3	3,000	419		
Cardiff, Tp.	1	800	173		
Cardinal, V.	3	3,000	1,321		
Cardwell, Tp.			372		
Carleton Place, Tn.	5	17,000	3,169		
Carling, Tp.			250		
Carlow, Tp.	2	2,500	900	100	
Carnarvon, Tp.	1	2,000	2,000		
Carrick, Tp.	22	25,000	400	50	
Cartwright, Tp.	8	11,400	921	26	
Casselman, V.	10	5,000	431	33	
Cassimir, Jennings, &c., Tps.	1	700	1,910		
Cavan, Tp.	9	5,300	5,865		
Cayuga, V.	1	6,000			
Cayuga N., Tp.	3	3,000	2,071		
Cayuga S., Tp.	1	2,000	300		
Chaffey, Tp.	3	1,900	1,192		
Chamberlain, Tp.	15	3,500	600		
Chandos, Tp.			100		
Chapleau, Tp.	9	35,000	200		33,000
Chapman, Tp.	2	40,000	800		
Chapple, Tp.	8	1,500	5,109	166	
Charlottenburg, Tp.			4,665	37	
Charlottetown, Tp.			2,200	550	
Chatham, C.	50	65,224	25,000	2,000	236,551
Chatsworth, V.			100	6	
Chelmsford, Tn.	4	3,000	500		
Chesley, Tn.	2	3,000	8,163	3,000	40,230
Chesterville, V.	3	15,000		600	
Chinguacousy, Tp.	7	11,100	15,000		27,000
Chippawa, V.	6	9,000	800		
Christie, Tp.	3	2,000	464		
Clarence, Tp.	14	27,500	2,560	900	
Clarendon and Miller Tps.	2	700	100		
Clarke, Tp.	9	8,800	3,625	148	
Clifford, V.	2	5,000	500		3,000
Clinton, Tn.	2	2,500	4,783		59,000

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	o.	\$	\$	\$	\$
Cobalt, Tn.	45	150,000	70,000	20,000	100,000
Cobden, V.	3	2,000	290		
Cobourg, Tn.	34	107,200	4,800	2,200	
Cochrane, Tn.	55	67,000	25,000		
Cockburn Island, Tp.			600		
Colborne, Tp.	6	4,000	2,000		
Colborne, V.	2	6,000	1,920		
Colchester N., Tp.	10	8,000	16,712		8,415
Colchester S., Tp.	50	50,000	2,054	24	
Coldwater, V.	1	15,000	111		23,000
Colman, Tp.			33,109	1,330	
Collingwood, Tn.	40	50,000	16,000	12,000	107,338
Collingwood, Tp.	15	12,900			
Copper Cliff, Tn.	17	32,000	656	461	
Cornwall, Tn.	9	45,000	7,649	1,219	140,564
Cornwall, Tp.	12	17,000	11,000	200	
Courtright, V.			662		
Cramahe, Tp.	1	7,000	5,230	26	
Creemore, V.	2	3,000	800	25	23,000
Crosby N., Tp.	4	3,500	353	20	
Crowland, Tp.	16	40,000	1,400		
Culross, Tp.	15	16,250	2,250	20	
Cumberland, Tp.	23	10,300	900		
Dack, Tp.	15	7,000	1,690	234	
Dalhousie and N. Sherbrooke Tps.	3	2,000	721		
Dalton, Tp.	4	4,400	100		
Darling, Tp.	2	500	200		
Darlington, Tp.			3,457	43	
Dawn, Tp.	4	5,100	2,000	475	
Day and Bright Add., Tps.	1	500	100		
Delaware, Tp.	8	10,000	1,800		
Delhi, V.	4	2,250	1,092	263	
Denbigh, Abinger, &c., Tps.	5	1,250	215	149	
Derby, Tp.			3,991	124	
Dereham, Tp.			21,700		
Deseronto, Tn.	1	2,500	490	975	67,310
Dilke, Tp.	2	1,100	1,671		
Dorchester N., Tp., ...			3,176		
Douro, Tp.	6	5,500	1,500		
Dover, Tp.	23	20,600	10,000	500	
Downie, Tp.	12	18,000	4,500	275	
Draper, Tp.			700		
Drayton, V.	4	6,000	688	80	
Dresden, Tn.			2,538	247	14,500
Drummond, Tp.	30	6,000	1,162	27	
Drury, Denison, &c., Tps.	1	850	3,348	553	226
Dryden, Tn.	6	6,500	394	39	
Dumfries, N., Tp.	4	4,000	5,246		
Dumfries, S., Tp.	9	16,000	3,500	165	
Dummer, Tp.			864		8,000
Dundalk, V.	2	3,600	500		
Dundas, Tn.	6	30,000	3,553	1,093	77,000
Dunn, Tp.	2	3,000	400		
Dunnville, Tn.	21	89,950	3,000	37,000	31,000

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No	\$	\$	\$	\$
Dunwich, Tp.	8	10,000	3,000		
Durham, Tn.	4	4,000	1,500		
Dutton, V.	2	3,000	800		
Dymond, Tp.	6	5,000	3,151		
Dysart, &c., Tps.	25	15,000	1,200		
Easthope, N., Tp.	5	5,000	24,000		20,000
Easthope, S., Tp.	1	4,750	1,474		
Eastnor, Tp.	4	2,000	2,025	80	
Eastview, V.	75	60,000	1,900		
Egansville, V.			2,010	120	
Egremont, Tp.	7	11,200	3,624	36	
Ekfrid Tp.	7	12,000	1,850		
Elderslie, Tp.	10	18,000	2,884	69	
Eldon, Tp.	15	12,500	3,000		
Elizabethtown, Tp.			4,456		
Ellice, Tp.	18	21,450	3,267	184	
Elma, Tp.	8	12,000	3,200		
Elmsley, N., Tp.	8	4,000	300	20	
Elmsley, S., Tp.	8	3,000	1,621		
Elora, V.			860		
Embro, V.	1	1,000	733		
Emily, Tp.	20	10,000	2,311		
Emo, Tp.	1	4,000	4,069		
Englehart, Tn.	3	5,000	855	270	
Enniskillen, Tp.			6,500	62	
Ennismore, Tp.	10	10,000	10,000	200	
Eramosa, Tp.	25	25,000	810	132	
Erin, Tp.	3	3,000	2,403	83	
Erin, V.	2	5,000	1,000		
Ernesttown, Tp.	3	2,000	3,928	60	
Escott Front, Tp.	4	1,100	1,879	14	
Esquesing, Tp.	9	25,000	3,000		
Essa, Tp.	9	8,000	7,500	100	
Essex, Tn.	11	9,600	250	1,500	34,000
Etobicoke, Tp.	48	90,000	3,800	760	
Euphemia, Tp.	4	2,000	670		
Euphrasia, Tp.	10	5,000	3,200		
Exeter, V.	2	3,000			22,000
Faraday, Tp.			500		
Fenelon, Tp.	4	2,500	1,620		
Fenelon Falls, V.	5	25,500	1,000		50,000
Fergus, V.	4	8,000	3,000		
Ferris, Tp.	10	2,000	1,030	107	
Finch, V.			200		
Fitzroy, Tp.	16	8,000	3,500		
Flamboro, E., Tp.	13	18,700	4,200	200	
Flamboro, W., Tp.	9	18,500	2,300	300	
Flos, Tp.	4	6,000	1,400		
Forest, Tn.	4	3,800	1,860	60	
Fort Erie, V.	30	40,000	4,000		56,000
Fort Francis, Tn.	6	11,000	1,318	1,339	76,845
Fort William, C.	700	2,700,000	136,504	193,977	1,550,754
Fredericksburg N., Tp.					
Fredericksburg, S., Tp.	8	3,100	504		

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Gainsborough, Tp.			3,500		
Galt, Tn.	75	100,000	7,500	17,525	277,667
Galway & Cavendish, Tps.	1	500	500		
Gananoque, Tn.	4	30,000	2,354	500	150,000
Garafraxa, E., Tp.	5	9,000	3,700	27	
Garafraxa, W., Tp.	10	10,000	3,586	94	
Garden Island, Tp.			232		
Georgetown, V.	17	75,000	974	90	42,500
Georgina, Tp.	3	2,000	1,579		
Glamorgan, Tp.	12	6,000	3,900		
Glanford, Tp.	8	15,000	1,040		
Glencoe, V.	1	1,200	110	173	15,000
Glenelg, Tp.	6	7,500	3,291	41	
Gloucester, Tp.	200	100,000	10,000	5,000	
Goderich, Tn.				2,517	131,674
Goderich, Tp.	5	5,400	3,000		2,067
Gordon, Tp.			1,800		
Gore Bay, Tn.	5	3,000	2,000		
Gosfield, N., Tp.	40	25,400	11,168	30	14,625
Gosfield, S., Tp.	15	10,000	5,586		
Goulburn, Tp.	10	3,250	1,687	28	
Gower, N., Tp.	10	10,100	700		
Gower, S., Tp.			721	15	
Grand Valley, V.	2	2,700	747	17	
Graham, Tp.	20	30,300	1,600	25	
Gravenhurst, Tn.	1	2,500			115,000
Greenock, Tp.			3,753	663	
Grey, Tp.	3	20,000	13,221		
Griffith and Matawatchan, Tps.			49		
Grimsby, V.	25	117,000	4,000	400	55,000
Grimsby, N., Tp.	8	13,500	3,600		
Grimsby, S., Tp.	7	7,500	1,000		
Guelph, C.	60	150,000	60,225	5,456	874,631
Guelph, Tp.			4,000		
Gwillimbury, E., Tp.	10	8,000	2,000		
Gwillimbury, N., Tp.	12	10,000	1,106		
Gwillimbury, W., Tp.			1,274		
Hagar, Tp.	4	600	361		
Hagerman, Tp.	8	2,500	100		
Hagersville, V.	7	14,000	1,000	500	
Haileybury, Tn.	130	225,000	12,555	21,792	78,996
Haldimand, Tp.			4,000	89	
Hallam, Tp.			1,069		
Hallowell, Tp.	5	4,500	1,211		
Hamilton, C.	1,162	2,539,185	326,418	167,821	2,573,410
Hamilton, Tp.	3	7,000	5,831	85	
Hanmer, Tp.	8	4,600	148		
Hanover, Tn.	40	45,000		58	31,000
Harley, Tp.	6	3,600	3,000	12	
Harvey, Tp.	3	2,500	3,800		
Harwich, Tp.	10	8,000	14,000	100	
Hastings, V.	1	2,000	1,500		
Havelock, V.	5	2,000	450		
Hawkesbury, Tn.	7	7,100	445	50	110,000
Hawkesbury, E., Tp.	15	15,000	6,300		

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Hawkesbury, W., Tp.	12	15,00.	1,500	175	
Hay, Tp.	6	10,000	3,000		
Hensall, V.	1	6,500	860	1,183	600
Hepworth, V.	3	2,500	134		
Hespeler, Tn.	10	15,000	2,300		9,458
Hibbert, Tp.			2,724	57	
Hillier, Tp.	5	3,000	1,000		
Hilton, Tp.	5	2,000	1,100		
Himsworth, N., Tp.	3	8,000	699		
Himsworth, S., Tp.	2	2,000	400	40	
Hinchinbrooke, Tp.	10	8,000	2,000		
Holland Landing, V.			250		
Hope, Tp.	6	4,300	900		
Horton, Tp.	3	1,000			
Houghton Tp.	10	10,000	1,863		
Howard, Tp.			5,000		
Howe Island, Tp.	4	1,600	20		
Howick, Tp.	6	6,000	7,442	140	
Howland, Tp.	4	450	219		
Hudson, Tp.	9	3,500	3,200		
Hullett, Tp.	4	3,000	300		
Humbaston, Tp.	20	30,000	2,319	57	
Humphrey, Tp.	2	1,000	125		
Hungerford, Tp.		150,000	1,500	25	
Huntingdon, Tp.	4	3,500	485		
Huntley, Tp.	15	15,200	3,000		
Huntsville, Tn.	5	3,000	12,000		53,000
Huron, Tp.	6	5,000	2,930	40	
Ignace, Tp.			535		
Innisfil, Tp.	13	10,000	2,856	10	
Iroquois, V.					40,000
Jaffray and Melick, Tps.	6	2,000	1,417		
James, Tp.	50	50,000	2,242	144	
Jarvis, V.	8	10,000	1,000	200	
Jocelyn, Tp.			1,700		
Johnson, Tp.			2,300		
Joly, Tp.	3	1,000	125		
Kaladar, Anglesea, &c., Tps.	4	2,000	364		
Kearney Tp.			50	255	
Keewatin, Tp.	8	6,500	1,500		
Kemptville, V.	2	3,000	1,300		
Kennebec, Tp.	10	5,500	1,000		
Kenora, Tn.	15	80,000	5,996	1,301	643,161
Keppel, Tp.	6	7,000	2,000		
Kerns, Tp.	3	1,500	4,000		
Kincardine, Tn.	4	6,500	3,687	119	68,303
Kincardine, Tp.			1,300		
King, Tp.	15	12,700	5,000	250	1,800
Kingston, C.	148	177,637	22,500	7,000	660,000
Kingston, Tp.	15	12,000	2,500		
Kingsville, Tn.	1	1,000	1,509		30,000
Kinloss, Tp.			2,123		
Kitley, Tp.	10	6,000	800		
Korah and Parke, Tps.	7	5,000	6,100		

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Lakefield, V.	3	4,500	1,250		
Lanark, Tp.			526		
Lanark, V.			880		
Lancaster, Tp.	6	10,000	972		
Lancaster, V.			800	10	
Latchford, Tn.			510	20	
Lavelle Tp.	3	3,000	4,815		
Lavant, Tp.	3	5,000	800		
Laxton, Digby &c., Tps.	8	4,000	1,100		
Leamington, Tn.	10	45,000	1,600	50	51,000
Leeds & Lansdowne, Front, Tps.	14	28,000	6,311	79	
Leeds & Lansdowne, Rear, Tps.	20	20,000	3,755		
Limerick, Tp.	2	650	668		
Lindsay, Tn.	25	50,000	25,000	1,500	125,000
Lindsay, Tp.	2	1,000	200		
Listowel, Tn.	1	4,000			40,000
Little Current, Tn.	10	10,000	1,000	400	
Lobo, Tp.	2	1,500	10,834	500	
Lochiel, Tp.	12	10,000	5,000		
Logan, Tp.	4	8,700	7,305	35	
London, C.	882	805,074	30,992	137,095	1,169,319
London, Tp.	100	100,000	20,037	258	
Longueil, Tp.	7	4,200	250		
L'Orignal, V.			2,000		
Loughborough, Tp.			1,163		
Lucan, V.	5	10,000			4,500
Lucknow, V.	2	3,100			10,000
Luther, E. Tp.			2,386	39	
Luther, W., Tp.	5	5,000	1,806	48	
McDougall, Tp.			590		
McGillivray, Tp.	9	12,000	2,000		
McIrvine, Tp.			156		
McKellar, Tp.	5	1,300	351		
McKillop, Tp.	2	2,500	6,000		
McKim, Tp.	3	1,500	1,800		
McLean and Ridout, Tps.	6	2,400	1,014	40	
McMurrich, Tp.	6	3,000	200		
McNab, Tp.	12	9,600	1,380		
Macaulay, Tp.			360	5	
Macdonald, Meredith, &c., Tps.	15	7,500	1,700	25	
Machar, Tp.			253		
Machin, Tp.	3	1,000	400	1,600	
Madoc, Tp.	6	6,000	1,200		
Madoc, V.	3	2,400	890	50	15,000
Maidstone, Tp.			28,468	57	10,000
Malahide, Tp.	10	7,000	5,980	8	
Malden, Tp.	14	14,700	2,600		
Manvers, Tp.	9	3,750	2,667	37	
Mara, Tp.	20	10,000			
March, Tp.	2	2,000	1,000		
Mariposa, Tp.	5	6,000	11,120	233	
Markham, Tp.	10	18,000	15,000		
Markham, V.	5	5,000			15,000
Marlborough, Tp.	5	1,000			
Marmora, V.	1	500	275	25	4,500

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Martland, Tp.	10	3,500	1,000		
Maryborough, Tp.	2	2,800	471	102	
Marysburgh, N., Tp.	10	13,900	1,200		
Marysburgh, S., Tp.	12	10,000	300		
Massey, Tn.	10	7,000	3,743		19,000
Matchedash, Tp.	2	2,000	1,600		
Matilda, Tp.	5	5,000	4,063		
Mattawa, Tn.			376	25	
Mattawan, Tp.			409		
Maxville, V.	2	4,000	100		
Mayo, Tp.			325		
Meaford, Tn.	20	40,000	40,500	500	35,000
Medonte, Tp.	12	10,000	5,500		
Medora and Wood, Tps.	5	3,000	3,060	300	
Melancthon, Tp.	12	15,000	1,437		
Merrickville, V.	2	4,000	2,000	500	
Merriton, V.	5	160,000	2,451	100	97,289
Mersea, Tp.	20	18,000	3,600	100	
Metcalfe, Tp.	3	3,500	4,400		
Middleton, Tp.	8	8,800	2,411		
Midland, Tn.	29	30,000	8,000	7,000	135,200
Millbrook, V.			4,000		
Milton, Tn.	15	26,000	1,000		40,000
Milverton, V.	2	7,000	2,700		
Mimico, V.	30	15,000			
Minden, Tp.			400		
Minto, Tp.	9	9,000	1,200		
Mitchell, Tn.			1,125		29,000
Monaghan N., Tp.	10	15,000	4,000		
Monaghan S., Tp.	3	3,500	1,600		
Monck, Tp.			1,844	5	
Monmouth, Tp.	12	5,000	5,000	20	
Mono, Tp.	2	2,500	5,000		
Monteagle and Herschel, Tps. ..	13	11,000	700	6	
Moore, Tp.	25	20,000	3,000		
Morley, Tp.	10	5,000	4,500		
Mornington, Tp.	15	14,100			
Morris, Tp.	4	2,600	3,700	20	
Morrisburg, V.			2,504		60,000
Moulton Tp.	10	7,000	275	47	
Mount Forest, Tn.	2	4,000	500		45,000
Mulmur, Tp.			3,053		
Murray, Tp.	4	3,000	1,648		
Muskoka, Tp.	1	200	876		
Nairn and Lorne, Tps.	2	2,000	350		
Napanee, Tn.	3	20,000	4,000	8,000	48,000
Nassagaweya, Tp.	15	30,000	5,000		
Neebing, Tp.			6,656		
Neelon and Garson, Tps.	6	2,000	2,269		
Nelson, Tp.	8	11,200	5,000		
Nepean, Tn.	50	60,000	6,006	624	
Nepigon, Tp.	5	4,400	900		2,500
Neustadt, V.			640		
New Hamburg, V.	8	30,000			20,000
New Liskeard, Tn.	35	75,000	2,651	21,628	79,250
Newboro, V.	40	20,000	800		

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Newburgh, V.			508		
Newbury, V.	1	2,000	300		
Newcastle, V.	2	4,000	500	100	
Newmarket, Tn.	70	105,000	9,630		51,000
Niagara, Tn.	4	12,000	1,500	3,600	70,000
Niagara, Tp.	5	10,000	2,000		
Niagara Falls, C.	95	300,000	16,000	6,500	325,000
Nicholl, Tp.			1,050		
Nipissing, Tp.	1	3,000	90		
Nissouri E., Tp.	12	10,000	4,000	350	
Nissouri W., Tp.	5	7,000	2,500		
North Bay, Tn.	80	180,000	26,552	17,000	100,000
Norwich, V.	3	6,000	300		
Norwich N., Tp.	16	12,000	5,544	100	
Norwich S., Tp.	9	6,450	5,213		
Norwood, V.	3	7,000	100		
Nottawasaga, Tp.	6	4,800	3,799	60	
Oakland, Tp.	3	1,700	649		
Oakley, Tp.			278		
Oakville, Tn.	43	138,000	6,144		86,000
O'Connor, Tp.	8	2,000	1,000		
Oil Springs, V.	1	750	568	92	
Olden, Tp.	2	1,000	1,590	26	
Oliver, Tp.	10	4,000	1,275		6,500
Omeme, V.	3	7,400	250		
Oneida, Tp.	20	10,000	703	33	
Onondaga, Tp.	4	4,600	1,400		
Ops, Tp.	5	8,500	4,245	58	
Orangeville, Tn.	3	2,400	560		60,000
Oxford, Tp.	4	8,500	3,330	78	
Orillia, Tp.	18	18,000	4,800		
Oro, Tp.	9	15,000	1,265		
Oshawa, Tn.	110	300,000	2,700	3,000	142,144
Osnabruck, Tp.	25	25,000	6,500	36	
Oso, Tp.	4	6,500	600	50	
Osprey, Tp.	70	62,000	4,149	97	
Otonabee, Tp.	10	7,500	4,291	70	
Ottawa, C.	671	3,022,650	278,210	86,342	2,750,000
Owen Sound, Tn.	78	300,900	16,464	4,854	475,057
Oxford on Rideau, Tps.	5	4,500	8,584		
Oxford E., Tp.	12	6,250	5,812	89	
Oxford N., Tp.			2,000		
Oxford W., Tp.	2	2,000	3,158		
Paipoonge, Tp.	2	3,500	4,547		
Paisley, V.	1	1,000	440	315	10,000
Pakenham, Tp.	2	5,000	250		
Palmerston, Tn.	4	10,000	4,000	4,000	61,000
Palmerston, N. and S. Canonto Tns.	1	400	400		
Pawineau, Tp.	3	700	1,807		
Paris, Tn.	12	30,000	3,516	200	140,293
Parkhill, Tn.	1	30,000	300	173	
Parry Sound, Tn.	12	125,000	500	1,000	130,000
Peel, Tn.	3	4,000	3,500	200	
Pelee, Tp.	19	15,000	750		
Pelham, Tp.	20	38,000	4,096	78	

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new build- ings erected during 1910.	Aggregate cost new buildings.	Spent on perma- nent improve- ments.	Spent on sanita- tion, including sewers.	Cost or value public utilities owned and oper- ated.
	No.	\$	\$	\$	\$
Pembroke, Tn.	10	45,500	2,928	442	100,000
Pembroke, Tp.	2	2,900	99		
Penetanguishene, Tn.	18	15,000	750	2,250	36,000
Percy, Tp.	5	10,000	3,000		
Perth Tn.	10	30,000	1,000	1,500	13,000
Peterborough, C.	231	517,958	59,410	16,574	470,959
Petewawa, Tp.	8	3,150	75	9	
Petrolea, Tn.	2	30,000	57,880	550	190,430
Pickering, Tp.	20	27,500	9,093	109	
Picton, Tn.	2	23,500	8,431		60,350
Pilkington, Tp.	9	11,300	1,773		
Pittsburgh, Tp.	7	4,150	4,092	5	
Plantagenet N., Tp.	24	25,000			
Plummer Add., Tp.	1	200	1,300		
Plympton, Tp.	12	2,300	4,492		
Point Edward, V.			200	28	
Port Arthur, C.	223	1,066,056	619,372	12,855	1,421,876
Port Carling, V.	6	6,000	593	136	
Port Colborne, V.	3	6,000	2,000		30,000
Port Dalhousie, V.	4	3,500	327		
Port Dover, V.	14	11,700	1,796	408	
Port Elgin, V.	1	1,500	500		40,000
Port Hope, Vn.	14	45,000	15,000		115,900
Port Perry, V.			1,300		23,500
Port Rowan, V.	8	5,000			
Port Stanley, V.	27	12,000	1,371	170	
Portland, Tp.	6	9,000	3,291		
Portsmouth, V.			540	25	
Powassan, Tn.	4	5,000	700	100	
Prescott, Tn.			22,000	50	82,250
Preston Tn.	75	200,000		21,000	145,000
Prince, Tp.	3	4,000	1,100		
Puslinch, Tp.	10	18,500	4,476	106	
Radcliffe, Tp.					
Raglan, Tp.			10,400	64	
Rainham, Tp.	7	5,400	375		
Rainy River, Tn.	25	58,000	2,400	14,000	33,000
Raleigh, Tp.	20	20,000	3,000	300	
Rama, Tp.	15	11,000	3,000		
Ramsay, Tp.			2,500		
Ratter and Dunnet, Tps.			1,892	25	
Rawdon, Tp.	4	8,000	600	70	
Reach, Tp.	4	5,000	1,500	44	
Renfrew, Tn.	30	70,000	4,000	600	121,235
Richmond, Tp.	6	3,000		3	
Richmond, V.	2	2,600	1,440		
Richmond Hill, V.	4	5,000	575		
Ridgetown, Tn.			2,000	159	
Rochester, Tp.	5	4,500	25,100	40	11,000
Rockland, Tn.	11	9,000	1,800	60	
Rodney, V.	1	6,300		25	
Rolph, Buchanan, &c., Tps.	7	3,300	95		
Romney, Tp.	10	10,000	5,000	50	
Ross Tn.	8	5,000	2,000	20	
Roxborough, Tp.			900		
Russell, Tp.	30	40,000	5,000		

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No	\$	\$	\$	\$
Ryde, Tp.	3	1,500	300		
Ryerson, Tp.					
St. Catharines, C.	137	170,175	10,200	20,000	390,000
St. Joseph, Tp.	12	5,500	2,000		
St. Mary's, Tn.	10	9,400	11,500		93,452
St. Thomas, C.	147	286,650	39,000	5,000	604,000
St. Vincent, Tp.					
Salter, May and Harrow, Tps.	30	6,003	1,200		
Saltfleet, Tp.	30	30,000	3,000	263	
Sandfield, Tp.			27		
Sandwich, Tn.	17	25,000	2,631	10,904	
Sandwich E., Tp.	40	78,000	15,922		
Sandwich S., Tp.			6,000		
Sandwich W., Tp.	17	16,000	8,300	5,059	
Sarawak, Tp.	3	3,500	288	35	
Sarnia, Tn.	20	40,000	7,022	22,634	206,750
Sarnia, Tp.	10	10,000	6,000		
Saugeen, Tp.	3	3,000	1,100		
Sault Ste. Marie, Tn.	300	500,000	28,773	7,731	
Scarborough, Tp.			10,050		
Schreiber, Tp.	9	7,000	704	14	
Scott, Tp.	7	9,000	2,618	67	
Scugog, Tp.	2	2,000	200		
Seaforth, Tn.	4	8,000		770	13,000
Sebastopol, Tp.			566		
Seneca, Tp.	4	5,000	500	60	
Seymour, Tp.			4,024		
Sheffield, Tp.			2,446		
Shelburne, V.	5	20,000	900		26,000
Shelburne, etc., Tp.			320		
Sherbrooke, Tp.	3	1,700	275		
Sherbrooke S. Tp.	20	6,000	1,500		
Sherwood, Jones, etc., Tps.	7	3,000	167	137	
Shuniah, Tp.	3	4,000			
Sidney, Tp.	10	5,000	1,200	750	
Simcoe, Tn.	19	30,000	500		78,000
Smith, Tp.	6	5,500	3,657	182	
Smith's Falls, Tn.	57	143,000	24,000	7,000	175,000
Snowdon, Tp.			347		
Sombra, Tp.			4,589	74	
Somerville, Tp.			1,415		
Sophiasburg, Tp.	8	5,100	423		
South River, V.	6	2,500	200		
Southampton, Tn.	5	15,000	596	111	33,870
Southwold, Tp.			3,980		
Springer, Tp.	20	6,000	3,300		
Springfield, V.			153		
Stamford, Tp.	50	100,000	5,000		
Stanhope, Tp.	1	340	113		
Stanley, Tp.	5	4,000	6,000	200	
Stayner, Tn.	1	2,500	400		24,000
Steelton, Tn.	55	2,060,000		31,100	33,000
Stephen, Tp.	20	11,000	6,520		
Stirling, V.	5	10,000	1,000		12,000
Stisted, Tp.	2	4,000	1,300	2	
Stovington, Tp.	5	4,000	2,500		
Stouffville, V.	2	3,500	143		25,000

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Stratford, C.	100	175,000	46,836	11,837	333,000
Strathroy, Tn.	4	10,700	1,800	500	60,000
Streetsville, V.			1,600		25,000
Strong, Tp.	3	2,000	1,000	15	
Sturgeon Falls, Tn.	2	12,700	535	5,245	46,812
Sturgeon Point, V.	3	3,000	500	150	
Sudbury, Tn.	97	410,305	33,528	1,558	162,833
Sullivan, Tp.	6	8,000	3,007		
Sundridge, V.			100		
Sunnidale, Tp.	16	15,000	3,200	60	
Sutton, V.	8	11,000	550	25	
Sydenham, Tp.	6	4,500	4,283		
Tara, V.			4,100	65	
Tarentorus, Tp.	21	5,500	4,562		
Tavistock, V.	5	6,500	2,500		
Tay, Tp.			2,990		
Tecumseth, Tp.	10	10,000	3,000		
Teeswater, V.	3	5,000	175	45	17,000
Tehkummah, Tp.	5	5,000	1,200		
Thamesville, V.			10,500		17,500
Thedford, V.	1	800	750	15	
Thessalon, Tn.	20	15,000	1,000		38,000
Thessalon, Tp.	6	8,000	764		
Thompson, Tp.	2	700	400		
Thorah, Tp.	4	4,700	2,922	33	
Thornbury, Tn.	3	7,000	694		
Thorold, Tn.	5	10,500	1,000	3,575	115,000
Thorold, Tp.	7	6,300	4,800	32	
Thurlow, Tp.	3	3,000	3,100		
Tilbury, Tn.	3	1,200		1,615	17,000
Tilbury N., Tp.	8	10,000	500		
Tilbury W., Tp.	27	16,000	2,000	50	
Tillsonburg, Tn.	10	15,000	6,000	4,200	25,000
Tiny, Tp.	10	8,000	2,000		
Tiverton, V.			200		
Toronto, C.	8,499	21,127,783	1,289,848	699,921	8,540,000
Toronto, Tp.	12	80,000	28,346	210	
Toronto Gore, Tp.	7	15,000	4,200		
Toronto N., Tn.	216	254,404	42,307	390	234,489
Tossorontio, Tp.	6	8,000	1,000		
Tottenham, V.	2	2,000	300		600
Townsend, Tp.	10	8,000	3,054	494	
Trafalgar, Tp.	18	24,000	6,000		
Trenton, Tn.	30	50,000	4,000	7,500	
Tuckersmith, Tp.	3	5,800	3,000		
Tudor and Cashel, Tps.			1,611		
Turnberry, Tp.	15	2,000	5,500	66	
Tweed, V.	4	4,000	600		
Tyendinaga, Tp.	1	1,420	1,581		
Usborne, Tp.	3	9,000	3,875	17	
Uxbridge, Tn.	3	6,000	5,000	2,300	
Uxbridge, Tp.	10	6,000	1,581	54	
Van Horne, Tp.	3	1,000	500	10	
Vankleek Hill, Tn.	6	12,000	2,200		

MUNICIPAL STATISTICS.—Continued.

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Vaughan, Tp.	20	20,000	12,652		
Verulam, Tp.	16	6,640	2,500		
Vespra, Tp.	20	25,000	2,000	123	
Vienna, V.			551		
Wainfleet, Tp.			5,783		
Walkerton, Tn.	6	18,720	1,363	126	45,000
Walkerville, Tn.	53	210,000	6,000	41,900	
Wallace, Tp.	20	25,000	3,600		
Wallaceburg, Tn.	30	64,225	1,500	1,000	
Walpole, Tp.	20	15,000	11,682	66	
Walsingham N., Tp.	5	6,500	2,131	84	
Walsingham S., Tp.	3	2,500			
Wardsville, V.	1	1,400	200		
Warwick, Tp.			2,500	21	
Waterdown, V.			1,615	40	
Waterford, V.	5	6,000	737	132	
Waterloo, Tp.	45	30,100	3,010		
Waters, Tp.			736		
Watt, Tp.	16	3,500	798		
Wawanosh E., Tp.	10	3,250	2,430		
Wawanosh W., Tp.	10	6,250	1,500		
Webbwood, Tn.	2	1,200	2,500	860	
Welland, Tn.	60	80,000	35,000	12,865	155,000
Wellesley, Tp.	14	11,050		139	
Wellington, V.	6	13,000	600	150	
West Lorne, V.	10	12,000	1,000	300	
Westmeath, Tp.	9	5,800	3,228	36	
Westminster, Tp.	25	41,000	5,463	120	
Weston, V.	20	25,000	1,171		7,500
Westport, V.	1	3,000	2,000		
Whitby, Tn.	3	8,000	3,900		82,000
Whitby E., Tp.	6	5,000	3,500		
Whitchurch, Tp.	12	15,000	2,327		
Warton, Tn.	6	4,500		1,000	40,000
Widdifield, Tp.	70	40,000	7,170		
Williams W., Tp.	2	1,000	1,104		
Williamsburg Tp.	6	9,000	4,056	21	
Willoughby, Tp.	3	6,000	1,800		
Wilrot, Tp.	20	30,000	5,000	500	
Winchester, Tp.	11	14,000	6,376		
Winchester, V.	1	6,000	300		
Windham, Tp.	6	6,900	1,400		
Windsor, C.	226	400,000	31,612	10,850	340,000
Wingham, Tn.	5	8,000	2,097	14,207	67,000
Wolfe Island, Tp.			400		20,000
Wolford, Tp.	3	1,300	830		
Wollaston, Tp.	4	800	1,000		
Woodbridge, V.	1	2,500	900		130
Woodhouse, Tp.	30	55,000	3,700	40	
Woodstock, C.	12	120,000	11,100		305,000
Woodville, V.			3,000		110
Woolwich, Tp.	11	20,000	4,378		
Worthington and Blue, Tps.	3	1,800	2,089		
Wroxeter, V.	1	1,000	155		2,500
Wyoming, V.	1	150	710		

MUNICIPAL STATISTICS.—*Concluded.*

Cities, Towns, Villages and Townships.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Yarmouth, Tp.	14	24,000	20,340	850	.....
Yonge Front, Tp.	2	5,500	2,500	.....	.....
Yonge and Escott, Rear, Tps. ....	.....	.....	1,396	.....	.....
York, Tp.	270	160,000	48,445	4,934	.....
Zone, Tp.	4	4,500	400	25	.....
Zorra E., Tp.	100	50,000	10,000	.....	.....
Zorra W., Tp.	10	15,000	4,600	.....	.....
Totals.....	21,977	48,415,750	6,037,664	2,110,006	33,865,057

SUMMARY.

Cities.	No. of new buildings erected during 1910.	Aggregate cost new buildings.	Spent on permanent improvements.	Spent on sanitation, including sewers.	Cost or value public utilities owned and operated.
	No.	\$	\$	\$	\$
Belleville	27	300,000	18,539	70,000	288,111
Brantford	377	681,030	279,694	104,215	474,817
Chatham	50	65,224	25,000	2,000	216,551
Fort William	700	2,700,000	136,504	193,977	1,550,754
Guelph	60	150,000	60,225	5,456	874,613
Hamilton	1,162	2,539,185	326,418	167,821	2,573,410
Kingston	148	177,637	22,500	7,000	660,000
London	882	865,074	30,992	137,095	1,169,319
Niagara Falls	95	300,000	16,000	6,500	325,000
Ottawa	671	3,022,650	278,210	86,342	2,750,000
Peterborough	231	517,558	59,410	16,574	470,959
Port Arthur	223	1,066,056	619,372	12,855	1,421,876
St. Catharines	137	170,175	10,200	20,000	390,000
St. Thomas	147	286,650	39,000	5,000	604,000
Stratford	100	175,000	46,836	11,837	333,000
Toronto	8,499	21,127,783	1,289,848	699,921	8,534,000
Windsor	226	400,000	31,612	10,850	340,000
Woodstock	12	120,000	11,100	524	305,000
18 Cities	13,747	34,604,422	3,301,460	1,557,967	23,287,410
124 Towns	2,764	8,271,391	1,015,502	481,693	9,382,034
138 Villages	631	1,138,275	134,777	10,165	1,038,480
306 Townships	4,828	4,387,312	1,554,138	59,698	130,133
786 Grand Totals	21,977	48,415,750	6,005,877	2,109,978	33,838,057

PUBLIC UTILITIES CLASSIFIED.

The following table gives, in a classified form, the public utilities owned and operated by the municipalities, an additional column to contain this information having been appended to the municipal tables for the last three years. Again there is a satisfactory increase of these operations.

Municipalities.	(1) Water Works.	(2) Electric Lighting.	(3) Gas Works.	(4) Street Railways.	(5) Power Plant.	(6) Telephone System.	(7) Miscellaneous
	\$	\$	\$	\$	\$	\$	\$
Acton, V.		19,000					
Alexandria, Tn.	42,420						
Alliston, Tn.	19,000						
Almonte, Tn.		40,000			with (2)		
Amherstburg, Tn.	41,500	4,500					
Arnprior, Tn.	116,000						
Aurora, Tn.	25,000						
Aylmer, Tn.	60,000	with (1)					
Barrie, Tn.	123,188	84,659					
Bath, V.		225					
Beamsville, V.	27,000						
Beeton, V.	14,500	5,000					
Belleville, C.	193,111		95,000				
Berlin, Tn.	216,271	341,456		127,046			
Blenheim, Tn.		12,500					
Blyth, V.		4,000					
Bobcaygeon, V.		25,000					
Bothwell, Tn.	4,500	6,600					
Bowmanville, Tn.		16,000					
Bracebridge, Tn.	163,000	with (1)					
Brampton, Tn.	160,000						
Brantford, C.	474,817						
Bridgeburg, Tn.	50,504						
Brockville, Tn.	230,000	225,000					
Burk's Falls, V.	37,000						
Burlington, V.	50,000						
Campbellford, Tn.	40,000	200,000					
Chapleau, Tp.	33,000						
Chatham, C.	215,551	20,000					
Chesley, Tn.	40,230						
Chinguacousy, Tp.						27,000	
Chippawa, V.	1,000						
Clifford, V.			3,000				
Clinton, Tn.	59,000						
Cobalt, Tn.	100,000						
Colborne, V.	439						
Colchester, N., Tp.						8,415	
Coldwater, V.	23,000						
Collingwood, Tn.	107,338						
Cornwall, Tn.	140,564						
Creemore, V.	23,000						
Deseronto, Tn.	45,310		19,000				
Dresden, Tn.		14,500					

PUBLIC UTILITIES CLASSIFIED.—*Continued.*

Municipalities.	(1) Water Works.	(2) Electric Lighting.	(3) Gas Works.	(4) Street Railways.	(5) Power Plant.	(6) Telephone System.	(7) Miscellaneous.
	\$	\$	\$	\$	\$	\$	\$
Drury, Tp.		226					
Dundalk, V.		8,000					
Dundas, Tn.	65,000	12,000					
Dunnville, Tn.	31,000						
Easthope, N., Tp.						20,000	
Elmira, V.	28,000						
Essex, Tn.	34,000						
Exeter, V.	22,000						
Fenelon Falls, V.		50,000					
Fort Erie, V.	52,000	4,000					
Fort Frances, Tn.	66,845	10,000					
Fort William, C.	816,931	187,323		372,500		174,000	
Galt, Tn.	211,667	66,000		with (2)			
Gananoque, Tn.	150,300						
Georgetown, V.	42,500						
Glencoe, V.	15,000						
Goderich, Tn.	131,674	with (1)					
Goderich, Tp.						2,067	
Gosfield, N., Tp.						14,625	
Gravenhurst, Tn.	20,000				95,000		
Grimsby, V.	55,000						
Guelph, C.	340,265	410,366		124,000			
Halleybury, Tn.	78,996						
Hamilton, C.	2,573,410						
Hanover, Tn.	31,000						
Hawkesbury, Tn.	110,000						
Hensall, V.	600						
Hespeler, Tn.		9,458					
Huntsville, Tn.	29,000	24,000					
Iroquois, V.	40,000	with (1)					
Kenora, Tn.	207,128	38,839			379,741	17,453	
Kincardine, Tn.	47,107	21,196					
King, Tp.		1,800					
Kingston, C.	300,000	360,000	with (2)				
Kingsville, Tn.	30,000						
Leamington, Tn.	26,000		25,000				
Lindsay, Tn.	125,000						
Listowel, Tn.	40,000						
London, C.	934,319	235,000					
Lucan, V.		4,500					
Lucknow, V.	10,000						
Madoc, V.		15,000					
Maldstone, Tp.						10,000	
Markham, V.	15,000	with (1)					
Marmora, V.		4,500					
Massey, Tn.	19,000						
Meaford, Tn.	35,000						
Merritton, V.	86,181	11,108					
Midland, Tn.	87,500	47,700					

PUBLIC UTILITIES CLASSIFIED.—Continued.

Municipalities.	(1) Water Works.	(2) Electric Lighting.	(3) Gas Works.	(4) Street Railways.	(5) Power Plant.	(6) Telephone System.	(7) Miscellaneous.
	\$	\$	\$	\$	\$	\$	\$
Milton, Tn.	25,000	15,000					
Mitchell, Tn.	29,000	with (1)					
Morrisburg, V.	30,000	30,000					
Mount Forest, Tn.	45,000	with (1)					
Napanee, Tn.		48,000					
Neepigon, Tp.	2,500						
New Hamburg, V.		20,000					
New Liskeard, Tn.	79,250						
Newmarket, Tn.	29,000	22,000					
Niagara, Tn.	35,000	35,000					
Niagara Falls, C.	200,000	125,000					
North Bay, Tn.	100,000						
Oakville, Tn.	70,000	16,000					
Oliver, Tn.						6,500	
Orangeville, Tn.	60,000						
Oshawa, Tn.	142,144						
Ottawa, C.	2,400,000	350,000					
Owen Sound, Tn.	260,659	120,998	93,400				
Paisley, V.	10,000						
Palmerston, Tn.	45,000	16,000					
Paris, Tn.	84,969	55,324					
Parry Sound, Tn.	60,000	70,000					
Pembroke, Tn.	100,000						
Penetanguishene, Tn.	36,000						
Perth, Tn.		13,000					
Peterborough, C.	470,959						
Petrolia, Tn.	190,430						
Picton, Tn.	60,350	with (1)					
Port Arthur, C.	448,954	78,440		447,466	303,663	143,353	
Port Colborne, V.	30,000						
Port Elgin, V.	40,000						
Port Hope, Tn.	115,000						
Port Perry, V.	6,000	17,500					
Prescott, Tn.	60,000	22,250					
Preston, Tn.	87,000	58,000					
Rainy River, Tn.	33,000						
Renfrew, Tn.	121,235						
Rochester, Tp.						11,000	
St. Catharine's, C.	340,000		50,000				
St. Mary's, Tn.	93,452						
St. Thomas, C.	269,000	250,000 with (2)	85,000				
Sarnia, Tn.	206,750						
Seaforth, Tn.	13,000						
Shelburne, V.	26,000						
Simcoe, Tn.	78,000						
Smith's Falls, Tn.	175,000						
Southampton, Tn.	33,870						
Stayner, Tn.	24,000						
Steelton, Tn.	33,000						
Stirling, V.		12,000					
Stouffville, V.	25,000						
Stratford, C.	204,000	129,000					
Strathroy, Tn.	60,000	with (1)					

PUBLIC UTILITIES CLASSIFIED.—*Concluded.*

Municipalities.	(1) Water Works.	(2) Electric Lighting.	(3) Gas Works.	(4) Street Railways.	(5) Power Plant.	(6) Telephone System.	(7) Miscellaneous.
	\$	\$	\$	\$	\$	\$	\$
Streetville, V.		25,000					
Sturgeon Falls, Tn.	46,812						
Sudbury, Tn.	162,833						
Teeswater, V.	17,000						
Thamesville, V.	11,000	6,500					
Thessalon, Tn.	25,280	11,230					
Thorold, Tn.	90,000	25,000					
Tilbury, Tn.	17,000						
Tillsonburg, Tn.		25,000			with (2)		
Toronto, C.	8,500,000	40,000					
Toronto, N. Tn.	233,289	1,200					
Tottenham, V.		600					
Walkerton, Tn.	45,000						
Welland, Tn.	155,000						
Weston, V.		7,500					
Whitby, Tn.	82,000	with (1)					
Warton, Tn.	40,000						
Windsor, C.	300,000	40,000					
Wingham, Tn.	37,000	30,000					
Wolfe Island Tp.							20,000
Woodbridge, V.		100					
Woodstock, C.	215,000	90,000					
Woodville, V.		110,000					
Wroxeter, V.		2,500					
Totals.....	26,827,122	438,766	285,400	1,156,012	778,404	434,413	20,000
Grand Total	33,865,057						

FREE EMPLOYMENT BUREAUS.

The five Free Employment offices operated by Branches of this Bureau at Brantford, Hamilton, London, Ottawa and Berlin have been carried on during the year with increased success. The details are tabulated below.

Applications for 1911.

Location.	Applications for work.		Help wanted.		Situations filled.	
	Male.	Female.	Male.	Female.	Male.	Female.
Berlin:—						
January	36	2	25	35	25	1
February	12	1	12	6	12	1
March	13	.....	18	10	13	.....
April	10	.....	12	2	10	.....
May	11	.....	16	16	11	.....
June	3	2	22	12	3	2
July	3	.....	16	5	3	.....
August	7	.....	31	17	5	.....
September	9	7	9	23	9	7
October	5	2	4	6	5	2
November	9	2	9	12	9	2
December .....	.....	.....	.....	.....	.....	.....
Totals	118	16	174	144	105	15
Brantford:—						
January	18	1	13	1	8	1
February	18	2	12	2	10	2
March	23	1	16	1	4	1
April	22	1	25	10	14	1
May	25	.....	67	3	21	.....
June	45	.....	41	4	33	.....
July	23	2	19	3	14	2
August	24	3	31	6	19	3
September	19	2	24	12	14	2
October	16	.....	38	7	16	.....
November	22	2	17	3	14	1
December	28	.....	17	.....	14	.....
Totals	283	14	320	52	181	13
Hamilton:—						
January	10	.....	10	1	10	.....
February	13	.....	12	1	12	.....
March	20	1	15	1	15	.....
April	23	.....	20	2	20	.....
May	31	.....	30	1	29	.....
June	24	1	25	.....	24	.....
July	23	.....	21	1	21	.....
August	18	.....	16	.....	16	.....
September	19	.....	17	.....	17	.....
October	36	.....	26	.....	26	.....
November	15	.....	12	.....	12	.....
December	14	.....	14	.....	14	.....
Totals	246	2	218	7	216	.....

Applications by Trades for year 1911.

Trade or calling.	Applications for work.		Help wanted.		Situations filled.	
	Male.	Female.	Male.	Female.	Male.	Female.
Agents	4		4		4	
Bakers	1					
Barbers			1			
Blacksmiths	10		5		3	
Boilermakers	1					
Bookbinders	1					
Bookkeepers	4		2		1	
Bootmakers	1					
Bricklayers	16		16		6	
Butchers	1		1			
Cabinetmakers			1			
Canvassers	1					
Carpenters	50		62		45	
Clerks	56	2	8	1	8	1
Coachmen and Teamsters	25		19		14	
Domestics	6	73	1	145	2	56
Drapers	1					
Engineers	8		1		1	
Factory Hands	1		1		1	
Farm Hands	48		74		39	
Firemen			1			
Foremen	2					
Gardeners	7		6		6	
Grinders	1		1		1	
Ironers	1		1		1	
Joiners			1			
Knitting Hands				10		
Labourers	845		664		532	
Lathers	1					
Machine Operators		6		31		6
Machinists	5					
Moulders	2		1		1	
Painters	32		15		9	
Plasterers	1		2			
Porters	13		11		10	
Printers	2					
Riveters	1					
Rubber Workers			12			
Salesmen and Women	4	1	2	1	1	1
Sewing Operators				64		
Spinners	2		2		2	
Steel Melters	1					
Steamfitters	1		1		1	
Stenographers		3		3		3
Tailors	5		3		3	
Travellers	1					
Warehousemen	1					
Washwomen				1		
Watchmakers			1			
Watchmen	1					
Yardmen			1			
Totals	1,173	89	921	256	681	67

Applications for 1911.—*Concluded.*

Location.	Applications for work.		Help wanted.		Situations filled.	
	Male.	Female.	Male.	Female.	Male.	Female.
London:—						
January	12	.....	7	.....	7	.....
February	12	.....	7	.....	6	.....
March	16	.....	11	.....	11	.....
April	19	.....	10	.....	16	.....
May	5	.....	11	.....	5	.....
June	5	.....	5	.....	5	.....
July	5	.....	5	.....	5	.....
August	5	.....	7	.....	3	.....
September	4	.....	4	.....	4	.....
October	3	.....	9	.....	3	.....
November	7	.....	5	.....	5	.....
December	11	1	5	1	5	1
Totals.....	104	1	92	1	75	1
Ottawa:—						
January	24	2	7	7	7	2
February	38	10	5	6	5	5
March	41	9	1	3	1	3
April	45	3	12	4	10	3
May	30	2	20	3	18	2
June	37	2	3	2	3	2
July	17	6	12	5	4	5
August	24	10	13	6	12	6
September	28	5	12	3	11	3
October	51	2	11	5	11	2
November	35	3	10	3	10	3
December	52	2	12	5	12	2
Totals.....	422	56	118	52	104	38
Grant Totals	1,173	89	921	256	681	67

LABOUR ORGANIZATIONS

The usual increase of returns from the labour organizations continued, but still the list is far from complete. It is not from want of effort to make it so, for there have been repeated appeals, but still many of the secretaries manifest their strange reluctance to do their part in showing organized labour in its full proportions.

RETURNS IN DETAIL OF LABOUR ORGANIZATIONS.

ALLANDALE.

Name,—Order of Railway Conductors, No. 355. Organized July 30th, 1893; total membership, 45; average earnings per week \$25; average earnings per hour, 33c.; average number of working hours, mileage system; wages paid monthly; total number (union and non-union) employed at calling in locality, 133; no difference in wages or hours between members and non-members; body incorporated. President, A. Riddell, Bradford Street, Barrie; Corresponding Secretary, F. Heax, Box 35, Allandale; meets 3rd Sunday in month.

Name,—Brotherhood of Locomotive Engineers, No. 486. Organized February 2nd, 1892; total membership 76; wages paid on mileage basis; average earnings per hour, pro rata; number of working hours, various; wages paid monthly; general cause of idleness, winter weather; total number (union and non-union) employed at trade in locality, 105; no difference in wages or hours of those engaged at trade in locality between members and non-members of organization; no cash benefits. President, A. Wilkinson, Box 24, Allandale, Ont.; Corresponding Secretary, Jno. Lowe, Box 24, Allandale, Ont.; meets 1st Sunday and 3rd Monday in month.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 412. Organized 1873; total membership 75; average earnings per week, \$15 to \$20; average earnings per hour, 21c. to 30c.; number of working hours first five days, irregular; number on Saturday, irregular; wages paid monthly; average number of days idle per member during the year, irregular; general cause of idleness, slackness in movement of freight; total number (union and non-union) employed at calling in locality, 100; no difference in wages of those employed at calling in locality between members and non-members of organization; death benefits, \$500 to \$3,000; body incorporated and registered. President, E. S. Kohlmeier, Allandale P.O.; Corresponding Secretary, Wm. Madge, Box 105, Allandale; meets 2nd and 4th Sundays in month.

AMHERSTBURG.

Name,—International Brotherhood of Steam Shovel and Dredgemen. Organized Feb. 16, 1904; total membership, 31; average earnings per week, \$32; average earnings per hour, 35c.; number of working hours first five days, 60; number on Saturday, 12; wages paid fortnightly; average number of days idle per member during year, 60; general cause of idleness, dredges laid up for winter; total number (union and non-union) employed at calling in locality, 75; all are members of organization; body incorporated and registered. President, D. J. Hoban, Amherstburg; Corresponding Secretary, J. J. Ryan, Amherstburg. Nights of meeting, to be decided by executive officers.

Name,—International Surface Rock and Drill Boat Workers. Total membership, 220; average earnings per week, \$16.50; average earnings per hour, 25c.; number of working hours first five days, 55; number on Saturday, 11; wages paid fort-

nightly: average number of days idle per member during year, 100; general cause of idleness, ice in river; total number (union and non-union) employed at trade in locality, 220; all at calling in locality are members of organization; body incorporated. President, R. Kitt, Amherstburg; Corresponding Secretary, Lemuel E. Parker, Amherstburg; meets 2nd and 4th Mondays in month.

BELLEVILLE.

Name,—Bricklayers', Masons' and Plasterers' International Union of Ontario, No. 30. Organized Sept. 11, 1905; total membership, 24; average earnings per week, \$16; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly or fortnightly; general cause of idleness, winter weather; total number (union and non-union) employed at calling in locality, 30; average number of days idle per member during year, 140; difference in wages and hours of labour of those engaged at trade in locality, non-members receive 25c. per day; hours, same; cash benefits, death, \$100 to \$260; body incorporated. President, Thomas Waymark, Herkimer Ave., Belleville; Corresponding Secretary, A. G. Coe, Mill St.; care Belleville P.O.; meets 1st and 3rd Mondays in month.

Name,—Brotherhood of Locomotive Engineers, No. 189. Organized December 23, 1875; total membership, 72; average earnings per week, \$30; average earnings per hour, 37c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during the year, 15; general cause of idleness, holidays; total number (union and non-union) employed at trade in locality, 72; cash benefits, sickness, \$5 to \$15; death, \$1,300 to \$4,500; reading-room for use of members; body incorporated and registered. President, T. H. Marshall, Belleville Station P.O.; Corresponding Secretary, N. Lavois; meets 1st and 3rd Sundays at 2.30 p.m.

Name,—Brotherhood Locomotive Firemen and Enginemen, No. 66. Organized 1877; total membership, 87; average earnings per week, \$18; number of working hours, irregular; wages paid monthly; average number of days idle per member during year, irregular; general cause of idleness, slackness in freight movements; total number (union and non-union) employed at trade in locality, 110; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, sickness, 50c. per day; death, \$500 to \$3,000; out of work benefits, dues kept paid up; body incorporated and registered. President, Alfred Calcutt, Belleville Station P.O.; Corresponding Secretary, Robert Milne, Belleville Station P.O.; meets 2nd and 4th Sundays in month.

Name,—Painters and Decorators; average earnings per week, \$12; average earnings per hour, 22½c.; number of working hours first five days, 9; number on Saturday, 8; wages paid weekly; average number of days idle during year, 60; general cause of idleness, slackness of trade; total number employed at trade in locality, 50 to 75; difference in wages between members and non-members of trade in locality, 20c. and 22½c.

BERLIN.

Name,—Boot and Shoe Workers' Union, No. 206. Organized March 10, 1900; total membership, 80; average earnings per week, male, \$10.75; female, \$7.75; average earnings per hour, male, 18½c.; female, 13½c.; number of working hours first five days, 50; number on Saturday, 7½ for 8 months, summer months, 5; wages paid fortnightly; average number of days idle per member during year, 30; general cause

of idleness, stock-taking; total number (union and non-union) employed at trade in locality, male, 210; female, 90; cash benefits, sickness, \$6-per week; death, \$100. President, Chas. H. Dicker, 233 Waterloo St., Berlin; Corresponding Secretary, H. W. Oliver, 130 Louisa St., Berlin; meets 2nd and 4th Fridays.

Name,—Bricklayers', Masons' and Plasterers' International Union, No. 12. Organized March, 1900; total membership 93; average earnings per week, \$23.22; average earnings per hour, 43c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; general cause of idleness, winter weather; all are members of organization in locality; cash benefits, death, \$200. President, John Nickolous, 110 Wellington St.; Corresponding Secretary, Arthur Plummer, 108 Weber St. East; meets every Friday evening.

Name.—Brewery Workers' (Twin City) Union, No. 170. Organized Feb. 17, 1909; total membership, 70; average earnings per week, \$13; average earnings per hour, 25c.; number of working hours first five days, 50 for six months, 45 for six months; number on Saturday, 8 for six months, 7 for six months; wages paid weekly; no idle days during year; total number (union and non-union) employed at trade in locality, 70; out of work benefits, free stamps; no special work for members. President, W. Massel, Waterloo; Corresponding Secretary, A. E. Shantz, 21 Elgin St., Berlin; meets 2nd and 4th Wednesdays in month.

Name,—Cigarmakers' International Union, No. 422. Organized July 24, 1899; total membership, 24; average earnings per week, \$11; average earnings per hour, 30c.; number of working hours first five days, 8; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 20; general cause of idleness, damp weather and slackness in trade; total number (union and non-union) employed at trade in locality, male, 40; female, 7; difference in wages and hours of labour of those engaged at trade in locality between members and non-members of organization, union men work 8 hours and non-union men 10 hours per day; union men receive \$7 per thousand; others receive \$5 per thousand; cash benefits, lack of employment, \$3 per week; sickness, \$5 per week; death, \$50 to \$550; strike benefit, \$5 per week; loan to travel in search of work, \$20. President, Leo Sobisch, Waterloo; Corresponding Secretary, Steve Wellheuser, Troy St., Berlin; meets 2nd Wednesday in month.

Name,—International Hodcarriers' and Builders' Laborers' Union, No. 160. Organized 1905; total membership, 55; average earnings per week, \$15.12; average earnings per hour, 28c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, mostly all winter; general cause of idleness, no work; total number (union and non-union) employed at trade in locality, 55; no non-union men employed. We carry an insurance, no other cash benefits. President, Emanuel Bentry; Corresponding Secretary, G. Hoffman, 58 Homewood Ave.; Berlin; meets 1st and 3rd Wednesdays in month.

Name,—Musicians' Protective Association. Organized January, 1906; total membership, male, 90; female, 2. President, E. C. Schultz, 26 Brubacker St., Berlin; Corresponding Secretary, G. A. Albrecht, 149 Wellington St., Berlin; meets 1st Tuesday every second month.

Name,—Federal Labour Union, No. 17. Organized April 21, 1901; total membership, 150; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, about 150; general cause of idleness, inclement weather during the winter months; total number

(union and non-union) employed at trade in locality, 200; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, non-union receive \$1.25 to \$1.50 per day of 10 hours; cash benefits, sickness, monetary grants; out of work grants by union; have social evening for entertainments. President, Fred. Ackerknecht, Frederick St., Berlin; Corresponding Secretary, Otto H. Zimmer, 17 Cameron St. North; meets 1st and 3rd Thursdays in month.

Name,—Journeyman Tailors' Union of America, No. 264. Organized 1901; total membership, male, 8; female, 8; average earnings per week, male, \$12; female, \$8; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 40; general cause of idleness, slackness of trade; total number (union and non-union) employed at trade in locality, male, 13; female, 11; difference in wages and hours of labour of those engaged at trade, between members and non-members of organization, 20c. a day; cash benefits, sickness, \$5 a week; death, \$100; body incorporated and registered. President, George Filsinger, 79 Ahrens St. West; Corresponding Secretary, Anna Wuest, 109 College St.; meets 1st Tuesday in month.

Name,—United Brotherhood of Carpenters and Joiners, No. 553. Organized April 14, 1900; total membership, 35; average earnings per week, \$16 to 18; average earnings per hour, 25c. to 30c.; number of working hours first five days, 9 and 10; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 2 to 3 months; general cause of idleness, slackness in trade during winter months; total number (union and non-union) employed at trade in locality, 250; difference in wages and hours of labour of those engaged at trade in locality between members and non-members of organization, 2c. to 3c. per hour; cash benefits, death, \$200; President, David Mather, 66 Charon St., Berlin; Corresponding Secretary, Peter Jacobs, 106 Wellington St., Berlin; meets first and third Fridays in month.

BLENHEIM.

Name,—International Maintenance of Ways Employees, No. 502. Organized October, 1909; total membership, 30; average earnings per week, \$9; average earnings per hour, 15c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; no difference in wages or hours between members and non-members; body registered. President, Arthur Mansell, Blenheim P.O.; Corresponding Secretary, Stephen Tilley, 48 Park Ave. West, Chatham; meets at call of President.

BRANTFORD.

Name,—Journeyman Barbers' International Union, No. 298. Organized May 26, 1901; total membership, 30; average earnings per week, \$12; average earnings per hour, 19c.; number of working hours first five days, 50; number on Saturday, 13½; wages paid weekly; total number employed at trade in locality, 45; all union; cash benefits, sickness, \$5 per week; death, \$75 to \$500; body incorporated and registered. President, James Rice, 5 George St.; Corresponding Secretary, Thomas Linscott, 248 Colborne St., Brantford; meets last Monday in month.

Name,—Bartenders' International League, No. 182. Organized May 17, 1899; total membership, 27; average earnings per week, \$13.50; average earnings per hour, 25c.; number of working hours first five days, 45; number on Saturday, 12; wages paid weekly, fortnightly and monthly; total number (union and non-union) employed at calling in locality, 29; difference in wages or hours of labour of those

engaged in calling in locality, between members and non-members of organization, non-members from \$20 to \$40 per month less than union men; cash benefits, \$3 per week for 13 weeks; death, \$50; body registered. President, F. C. Halberstadt, King's Hotel, Market St., Brantford; Corresponding Secretary, Thomas McCuster, The Bodega Tavern, Brantford; meets last Sunday in month.

Name,—Bricklayers' and Masons' International Union, No. 9. Organized March 23, 1899; total membership, 85; average earnings per week, \$21.12; average earnings per hour, 48c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; total number (union and non-union) employed at trade in locality, 90; difference in wages and hours of labour of those engaged at trade in locality between members and non-members of organization, non-members work 10 hours per day, and receive from 25c. to 35c. per hour; cash benefits, death, \$50 to \$200. President, A. E. Brooks, 70 Richmond St.; Corresponding Secretary, B. E. Pearcey, 74½ Erin Ave.; meets alternate Thursdays.

Name,—Amalgamated Society of Carpenters and Joiners, No. 783. Organized May 4, 1906; total membership, 20; average earnings per week, \$14; average earnings per hour, 30c.; number of working hours first five days, 10 in summer, 8 in winter; number on Saturday, 5 in summer, 8 in winter; wages paid weekly; average number of days idle per member during year, 50; general cause of idleness, unfavorable weather and slackness in trade; total number (union and non-union) employed at trade in locality, 175; difference in wages and hours of labour of those engaged at trade in locality, 2½c. to 7½c. per hour less; hours same; cash benefits, sickness, \$3 per week for twenty-six weeks; death, \$60; superannuation, \$2.00 and \$1.75; lack of work, \$2.50 per week for twelve weeks; strike pay, \$3.75 per week; tool insurance up to \$100; contingent fund for special cases; body registered. President, Arthur Tooke, Dundas St., Brantford; Corresponding Secretary, James C. Coles, 238 Park Ave., Brantford; meets alternate Mondays.

Name,—United Brotherhood of Carpenters and Joiners of America, No. 498. Organized Feb. 21, 1900; total membership, 25; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; body incorporated. President, Charles Cummons, 331 Rawdon St., Brantford; Corresponding Secretary, Joseph Swift, 292 Park Ave., Brantford; meets 2nd and 4th Tuesdays.

Name,—International Moulders' Union, No. 29. Organized 1852; total membership, 225; average earnings per week, \$15; average earnings per hour, 25c.; number of working hours first five days, 50; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 6; general cause of idleness, stock-taking; total number (union and non-union) employed at trade in locality, 350; difference in wages and hours of labour of those engaged at trade in locality between members and non-members of organization, 25 per cent. better in union shop; cash benefits, sickness, \$5.40 per week; death, \$200; out of work benefits, dues remitted. President, Edward Lavery; Corresponding Secretary, C. J. Crowley, 471 Colbourne St.; meets Monday.

Name,—American Federation of Musicians, No. 467. Organized Dec. 1, 1907; total membership, male, 76; female, 4; average earnings per week, male, \$3; female, \$3; average earnings per hour, male, 50c.; female, 50c.; wages paid nightly; total number (union and non-union) employed at calling in locality, male, 100; female, 8; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, non-union will play for anything they can get. President, W. McHutchison, 37 Ontario St., Brantford; Correspond-

ing Secretary, Fred. Willoughby, 50 King St., Brantford: meets 2nd Wednesday in month.

Name,—Operative Plasterers' International Association, No. 164. Total membership, 9; average earnings per week, \$20; average earnings per hour, 40c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly: average number of days idle per member during year, from 30 to 90; general cause of idleness, cold weather: total number (union and non-union) employed at trade in locality, 25; no difference in wages or hours between members and non-members: body incorporated and registered. President, R. G. Girdlestone, Northumberland St.: Corresponding Secretary, Chas. E. Potter, 93 Cayuga St.; meets 2nd and last Thursdays.

Name,—Journeymen Plumbers, Gas and Steam Fitters Union, No. 186. Organized 1899: total membership, 16; average earnings per week, \$16; average earnings per hour, 33c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 75; general cause of idleness, slack time during winter months; total number (union and non-union) employed at trade in locality, 25; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 1 hour for five days, 4 hours on Saturday; wages not known; cash benefits, sickness, \$5 per week; death, \$100; body incorporated. President, A. Squibb, 100 William St.; Corresponding Secretary, James W. Croucher, 51 Church St.; meets 1st and 3rd Tuesdays in month.

Name,—Typographical Union, No. 378. Organized June, 1900; total membership, 25; average earnings per week, \$14.50; average earnings per hour, 30c.; number of working hours first five days, 42½; number on Saturday, 5½; wages paid weekly: no idle days; total number (union and non-union) employed at trade in locality, 30; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members, non-union men run shops of their own; cash benefits, death, \$75; superannuation, \$4 weekly; special course for members, International provides technical course. President, W. D. Reeves, 109 Terrace Hill Street; Corresponding Secretary, I. D. Scruton, 112 Sydenham Street; meets 3rd Saturday in month.

Name,—International Printing Pressmen's Union, No. 124. Organized December, 1908: total membership, 8; average earnings per week, \$14.80; average earnings per hour, 30c.; number of working hours first five days, 42½; number on Saturday, 5½; wages paid weekly: no idle days; total number (union and non-union) employed at trade in locality, 14; no difference in wages or hours between members and non-members: death benefits, \$100. President R. T. McClintie, 99 Terrace Hill Street; Corresponding Secretary, R. T. McClintie, *pro tem*.

Name,—Journeymen Tailors Union of America, No. 117. Organized 1890: total membership, male 35; female 27; average earnings per week, male \$12; female \$7; average earnings per hour, male 25c.; female 15c.; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; average number of days idle per member during year, 90; general cause of idleness, slack trade: no difference in wages or hours of labour of those engaged in trade in locality between members and non-members of organization; cash benefits, \$5 per week for ten weeks; death, \$100; body incorporated and registered. President, Wilfred Jewell, 129 William Street, Brantford; Corresponding Secretary, R. J. Campbell, 162 Darling Street, Brantford; meets 4th Tuesday.

BRIDGEBURG.

Name, Brotherhood of Railway Carmen, No. 10. Average earnings per week, \$12.40; average earnings per hour, 18c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; no difference in wages or hours of labour of those engaged at calling in locality between members and non-members of organization; cash benefits, sickness 50c. per day; death, insurance with railroad; superannuation after 65 years of age. Corresponding Secretary, A. Merryweather, Bridgeburg, Ont.

Name,—Brotherhood of Locomotive Engineers, No. 679. Organized May 24th, 1905; total membership, 19; average earnings per week, \$27.72; average earnings per hour, 36c.; number of working hours first five days, 55; number on Saturday, 11; wages paid weekly; average number of days idle per member during year, 12; total number (union and non-union) employed at calling in locality, 19; no difference in wages or hours of labour of those engaged at calling in locality between members and non-members of organization; body incorporated. President, Richard Walsh, 1,892 Niagara Street, Buffalo, N.Y.; Corresponding Secretary, M. R. Harvey, Bridgeburg, Ont.; meets 1st Wednesday and 3rd Tuesday.

BROCKVILLE.

Name,—Journeymen Barbers' International Union, No. 387; organized March 26th, 1902; total membership, 14; average earnings per week, \$12; number of working hours first five days, 60; number on Saturday, 15; wages paid weekly; total number (union and non-union) employed at trade in locality, 16; cash benefits, sickness, \$5 per week; death, \$75 to \$500. President, A. W. Baxter, 33 King Street West; Corresponding Secretary, Fred. J. Clutterbuck, 7 King Street West; meets last Monday in month.

Name,—Brotherhood of Locomotive Engineers, No. 118. Organized 1869; total membership, 43; average earnings per week, \$30; average earnings per hour, passenger, \$3.60 per mile; freight, \$4.20 per mile; wages paid monthly; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, sickness, \$3.50 per week, by company; \$3 per week by society; death, from \$750 to \$4,000 by society; \$350 to \$2,000 by company; the company pays a premium of from \$20 to \$40, according to length of service; meetings for members twice a month. President, E. Mortimer, 38 Charles Street, Brockville; Corresponding Secretary, Robt. Wardrop, 39 Daniel Street, Brockville; meets every Tuesday in month.

Name,—Brotherhood of Locomotive Firemen and Enginemen. Organized August, 1881; total membership, 50; average earnings per week, \$15; number of working hours, irregular; wages paid monthly; average number of days idle per member during year, 15; general cause of idleness, holidays; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, death, according to policy carried. President, C. W. Buell, Brockville; Corresponding Secretary, W. J. Dowell, 22 East James Street, Brockville; meets Tuesday at 1.30 p.m.

Name,—International Moulders' Union, No. 329. Organized November 23rd, 1909; total membership, 12; average earnings per week, \$15; average earnings per hour 25c.; number of working hours first five days 50; number on Saturday, 10; wages paid fortnightly; average number of days idle per member during year, 60;

general cause of idleness, lockout; total number (union and non-union) employed at trade in locality, 75; no difference in wages or hours of labour of those engaged at trade in locality between members and non-members of organization; cash benefits, sickness, \$5.40 per week; death, \$200; out of work benefit, dues remitted. President, Robert Cleland, Abbott Street, Brockville; Corresponding Secretary, Jas. P. Gordon, P. O. Box 150, Brockville; meets 1st and 3rd Tuesdays.

Name, Journeymen Tailors' Union of America, No. 262. Organized January 1, 1901; total membership, male 11; female, 11; average earnings per week, male, \$10; female, \$6; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; average number of days idle per member during year, 30; general cause of idleness, dullness of trade; total number (union and non-union) employed at trade in locality, male, 17; female, 20; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, about ten per cent. in wages; about the same hours of labour; cash benefits, sickness, \$5 per week for ten weeks; death, \$100 after four years' membership. President, Chas. A. Cato, Garden Street, Brockville; Corresponding Secretary, Miss Mable Hodge, Hamilton Street, Brockville; meets 1st Monday in month.

CARLETON PLACE.

Name,—International Moulders' Union, No. 362. Organized 1901; total membership, 19; average earnings per week, \$18; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; general cause of idleness, stocktaking and repairs; total number (union and non-union) employed at trade in locality, 24; cash benefits, sickness, \$5.40 per week; death, \$100 to \$200; out of work benefits, 13 weeks dues. President, John McPhail, Box 292, Carleton Place; Corresponding Secretary, J. J. Carson, Box 292 Carleton Place; meets 3rd Thursday in month.

Name,—Maintenance of Way Employees (C. P. R.), No. 222. Total membership, 108; average earnings per week, \$10.20; average earnings per hour, 17c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly. President, James Millikin, Carleton Place; Corresponding Secretary, I. P. Steeles, Box 313, Carleton Place; meets last Sunday in each month.

Name,—Machinist Helpers and Labourers, No. 12892. Organized February, 1910; total membership, 11; average earnings per week, \$8; average earnings per hour, 14c.; number of working hours first five days, 45; number on Saturday, 5; general cause of idleness, short time; total number (union and non-union) employed at trade in locality, 30; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, no difference in hours; machinist helpers, 18c.; labourers, 15c. President, George Phillips, Carleton Place; Corresponding Secretary, John M. Burrows, Box 178, Carleton Place; meets 3rd Thursday in month.

CHAPLEAU.

Name,—Brotherhood Locomotive Engineers', Sub-Div. 319. Organized October 2, 1886; total membership, 50; average earnings per week, \$25; average earnings per hour, mileage basis; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 50. President, James Rose, Chapleau, Ont.; Corresponding Secretary, B. Warner, Box 158, Chapleau, Ont.; meets every Monday at 2 p.m.

Name,—Brotherhood Locomotive Firemen and Enginemen (Snowdrift Lodge), No. 321. Organized 1886; total membership, 80; average earnings per week, \$30; average earnings per hour, mileage basis; number of working hours per week, mileage basis; wages paid monthly; general cause of idleness, traffic depression; total number (union and non-union) employed at calling in locality, 90; no difference in wages and hours of labour of those engaged at calling in locality between members and non-members of organization, provided all have sufficient experience to draw senior pay; cash benefits, sickness, \$4 per week; death, \$500, \$1,000, \$1,500, \$2,000 and \$3,000; classes for instruction for promotion; body incorporated and registered. President, P. Buncombe, Chapleau; Corresponding Secretary, S. Kruger, Chapleau, Ont.; meets every Wednesday.

Name,—International Association of Machinists, No. 535. Organized 1909; total membership, 26; average earnings per week, \$19.60; average earnings per hour, 36c.; number of working hours first five days, 50; number on Saturday, 5; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 30; no difference in wages or hours of labour of those engaged in calling in locality between members and non-members of organization; cash benefits, lack of employment, dues remitted; death, according to member's standing; superannuation, according to member's standing; out of work, varies according to cause; President ; Corresponding Secretary, V. Beardmore, Box 57, Chapleau; meets 2nd and 4th Wednesdays.

Name,—Brotherhood of Railway Trainmen, No. 246. Organized July, 1887; total membership, 102; average earnings per week, \$25; average earnings per hour, 36c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; total number (union and non-union) employed at calling in locality, 122; cash benefits, death, \$1,350, \$1,000 and \$500; body incorporated and registered. President, W. McMullen, Chapleau; Corresponding Secretary, A. Wilson, Chapleau; meets every Thursday.

CHATHAM.

Name,—Chatham Typographical Union, No. 421. Organized October 18th, 1909; total membership, 14; average earnings per week, \$12; average earnings per hour, 25c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; no idle days; difference in wages and hours of labour of those engaged at trade in locality between members and non-members of organization, no difference in hours, slight difference in wages; cash benefits, death, \$75; superannuation, 4 per week; body registered. President, W. A. McWhirter, 124 Selkirk Street, Chatham; Corresponding Secretary, Thomas W. Clark, 91 Prince Street North, Chatham; meets 1st Saturday in month.

Name,—United Garment Workers, No. 44. Organized January 28, 1911; total membership, male, 1; female, 25; number of working hours first five days, 42½; number on Saturday, 4½; wages paid weekly; total number (union and non-union) employed at trade in locality, female, 30; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 15 hours per week. President, Mrs. W. J. Bertram, 270 Wellington Street, Chatham; Corresponding Secretary, Miss Edith Kennedy, Chatham; meets Tuesday in month.

COLLINGWOOD.

Name,—Journeyman Barbers' International Union, No. 528. Organized May 23rd, 1903; total membership, 7; average earnings per week, \$12; average earnings

per hour, 19c.; number of working hours first five days, 50; number on Saturday, 13; wages paid weekly; no idle days; cash benefits, sickness, \$5 per week; death, \$75 to \$500. President, Leonard Fryer, Huron Street, Collingwood; Corresponding Secretary, Fred. Bollen, Box 536, Collingwood; meets 1st and 3rd Monday in month.

Name,—Bricklayers and Masons International Union, No. 19. Organized September 6, 1902; total membership, 9; average earnings per hour, 37½c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 175; general cause of idleness, winter weather; total number (union and non-union) employed at trade in locality, 14; difference in wages and hours of those engaged at trade in locality, between members and non-members of organization, non-members get any wage from 20c. to 30c., ten hours a day. President, John Gilham, Box 777, Collingwood; Corresponding Secretary, Willis Court, Box 797, Collingwood; meets 3rd Wednesday in month.

Name,—International Longshoremen's Association, No. 476. Organized April, 1903; total membership, 10; average earnings per week \$12; average earnings per hour, 27½c.; number of working hours first five days, 50; number on Saturday, 10; wages paid when job completed; average number of days idle per member during year, 120; general cause of idleness, close of navigation; total number (union and non-union) employed at trade in locality, varies from 10 to 25; no difference in wages or hours between members and non-members; body incorporated and registered. President, Wm. Nutt, Ste. Marie Street, Collingwood; Corresponding Secretary, E. Johnston, Beech Street, Collingwood; meets 1st and 3rd Thursdays.

Name,—International Association of Machinists, No. 627. Organized October 6th, 1903; total membership, 32; average earnings per week, \$16; average earnings per hour, 26c.; number of working hours first five days, 50; number on Saturday, winter, 9; summer, 5; wages paid fortnightly; general cause of idleness, slackness in trade; total number (union and non-union) employed at calling in locality, 40; no difference in wages and hours of labour of those engaged at calling in locality between members and non-members of organization; cash benefits, sickness, local insurance; death, \$50 to \$250; body registered. President, Mark Fryer, Box 585, Collingwood; Corresponding Secretary, Allan Ramsay, Collingwood; meets 2nd and 4th Wednesday in month.

Name,—International Union of Steam Engineers, No. 321. Total membership, 6; wages paid fortnightly; no idle days; total number (union and non-union) employed at trade in locality, 12; no difference in wages or hours between members and non-members; body registered. President, John Bannon, Collingwood; Corresponding Secretary, E. J. Mallen, Collingwood; meets Monday.

CORNWALL.

Name,—Journeyman Tailors' Union of America, No. 355. Organized 1902; total membership, 9; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; average number of days idle per member during year, 20; general cause of idleness, slackness in trade; total number (union and non-union) employed at calling in locality, male, 11; female, 10; cash benefits, sickness, \$5 per week; death, \$100; body incorporated and registered. President, T. Delbeck, First Street, Cornwall; Corresponding Secretary, Chas. Stafford, Second Street East, Cornwall, Box 390; meets 1st Monday in month.

DESERONTO.

Name,—Order Railroad Telegraphers, Div. No. 43. Organized July 22, 1910; total membership, 17; average earnings per week, \$14; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, male, 22; female, 3; no difference in wages or hours of labour of those engaged at calling in locality between members and non-members of organization. President, ; Corresponding Secretary, R. A. McKeoun, Deseronto, Ont.

DUNDAS.

Name,—International Moulders' Union, No. 269. Organized February 17, 1900; total membership, 24; average earnings per week, \$15; average earnings per hour, 28c.; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 26; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, sickness, \$5.40 per week; death, \$100 to \$200; out of work, 40c. per week. President, George S. Stutt, Box 239, Dundas; Corresponding Secretary, Wm. Watts, Box 315, Dundas; meets 3rd Monday in month.

ELMIRA.

Name,—Amalgamated Woodworkers' International Union of America, No. 129. Organized July, 1903; total membership, 14; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 12; general cause of idleness, Christmas holidays; total number (union and non-union) employed at trade in locality, male, 115; female, 2; no difference in wages or hours between members and non-members; cash benefits, accident, 80 per cent. of doctor's bill. President, Thos. Dillon, Elmira, Ont.; Corresponding Secretary, S. B. Frey, Park Avenue, Elmira, Ont.

ESSEX.

Name,—International Brotherhood Maintenance of Way Employees (Townsend Lodge), No. 312. Organized January 17, 1907; total membership, 30; average earnings per week, \$12; average earnings per hour, 17c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 50; general cause of idleness, slack work in winter months; total number (union and non-union) employed at calling in locality, 30; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; body incorporated. President, A. B. Lane, 3,900 Olive Street, St. Louis; Corresponding Secretary, Samuel J. Gegg, 3,900 Olive Street, St. Louis, Mo.; meets 2nd and 4th Wednesdays in month.

FORT WILLIAM.

Name,—International Brotherhood of Boilermakers and Iron Ship Builders and Helpers of America, No. 505. Organized 11th September, 1907; total membership, 20; average earnings per week, \$20; average earnings per hour, 40c.;

helpers, \$12 per week; 261½c. per hour; number of working hours first five days, 47½; number on Saturday, 5; wages paid monthly; average number of days idle per member during year, 30; general cause of idleness, reduction of expenses on C. P. R.; total number (union and non-union) employed at trade in locality, 25; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union work 521½ hours at 40c.; non-union 60 hours at from 25c. to 35c. per hour; sick benefits, death, \$100; out of work, dues remitted; body registered. President, Frederick Stafford, 420 Mary Street, Fort William; Corresponding Secretary, William Morris, 335 Ogden Street, Fort William; meets 1st and 3rd Saturdays in month.

Name,—Bricklayers', Masons' and Plasterers' International Union, No. 25. Total membership, 88; average earnings per week, \$25; average earnings per hour, 60c.; number of working hours, first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 120; general cause of idleness, snow and frost; total number (union and non-union) employed at trade in locality, 88; all are members of organization in locality; death benefit, \$100 upwards; body registered. President, Stephen Hartley, 24 Shuniah Road, Port Arthur; Corresponding Secretary, Arthur Scarlett, Box 458, Port Arthur; meets 2nd and 4th Mondays in month.

Name,—Amalgamated Society of Carpenters and Joiners, No. 787. Organized March 20, 1908; total membership 60; average earnings per week, \$24; average earnings per hour, 40c.; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; average number of days idle per member, during year, 50; general cause of idleness, lack of work; total number (union and non-union) employed at trade in locality, 400; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, lack of employment, \$2.50 per week; body incorporated and registered. President, D. McCallum, Box 287, Fort William; Corresponding Secretary, H. Edwards, 134 South Franklin Street, Fort William; meets 1st and 3rd Mondays in month.

Name,—International Longshoremen's and (Coal Handlers) Trimmers' Association, No. 746. Organized August 30th, 1906; total membership 150; average earnings per hour, 29c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 75; general cause of idleness, winter months and slack times; total number (union and non-union) employed at calling in locality, 500; difference in wages or hours of labour of those engaged at calling in locality, between members and non-members of organization, in some cases 5c. per hour in favour of members, in others none; hours of work the same; body incorporated and registered. President, Nicholas Domenico, Fort William; Corresponding Secretary, G. E. Boso, 114 Huron Street, Fort William; meets at call of President.

Name,—International Longshoremen's Association (Grain Trimmers), No. 479. Organized 1904; total membership 30; average earnings per week, \$20; average earnings per hour 25c.; number of working hours first five days, 60; number on Saturday, 15; wages paid weekly; average number of days idle per member during year, 150; general cause of idleness, stoppage of navigation; total number (union and non-union) employed at calling in locality, 40; no difference in hours of labour and wages, as all are members of the Association in locality; body incorporated and registered. President, T. Hall, 19 Ontario Street, Port Arthur; Corresponding Secretary, John Laurie, 131 John Street S., Fort William; meets 1st Wednesday in month.

Name,—Order of Railway Conductors, Kakabeca, Div. 286. Total membership, 36; wages paid monthly; all employed in locality are members of organization; cash benefits, death, \$1,000 to \$3,000; body incorporated and registered. President, D. H. Beaton, 346 N. Syndicate, Fort William; Corresponding Secretary, A. B. Marcotte, 439 Wiley Street, Fort William; meets 2nd and 4th Sundays in month.

Name,—Brotherhood of Locomotive Engineers. Total membership, 50; average earnings per week, \$40; average earnings per hour 50c.; number of working hours, seven days a week; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 65; cash benefits, death, insurance policy; body incorporated and registered. President, Warren S. Stone, Fort William; Corresponding Secretary, W. G. Smith, 407 Prince Arthur Building; meets 1st and 3rd Mondays in month.

Name,—International Association of Bridge and Structural Iron Workers, No. 53. Organized January 31, 1903; total membership, 50; average earnings per hour, 50c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 50; death benefit, \$100; incorporated and registered. President, William Higgins, 423 South Archibald Street; Corresponding Secretary, Frank Souch, 345 North Vickers Street; meets 1st and 3rd Fridays in month.

Name,—International Moulders' Union, No. 429. Organized September 28, 1906; total membership, 13; average earnings per week, \$15; average earnings per hour, 25c.; number of working hours first five days, 50; number on Saturday, 9; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 48; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5.40 per week; death, \$100, \$150, 175, \$200; out of work benefits, dues remitted. President, John Dick, corner Catharine and William Streets; Corresponding Secretary, W. Newman, 806 Northern Avenue, Fort William; meets first and last Fridays in month.

Name,—United Association of Plumbers, Gas and Steamfitters. Organized July 1, 1910; total membership, 40; average earnings per week, \$22; average earnings per hour, 50c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; no idle days; cash benefits, sickness, \$5 per week; death, \$100; body incorporated and registered; President, Martin Higgins, Victoria Avenue; Corresponding Secretary, Harry Allen, South Mark Street; meets every 2nd Thursday in month.

GALT.

Name,—Journeymen Barbers' International Union of America, No. 413. Organized July 31st, 1902; total membership, 16; average earnings per week, \$10; average earnings per hour, 17c.; number of working hours first five days, 45; number on Saturday, 14; wages paid weekly; total number (union and non-union) employed at calling in locality, 29; cash benefits, sickness, \$5 a week after first week; death, from \$75 to \$500; body incorporated. President, Wesley J. Fettes, Main Street, Galt; Corresponding Secretary, Bert. B. James, 6 South Water Street, Box 698; meets last Thursday in month.

Name,—Boot and Shoe Workers' International Union, No. 330. Organized September 3rd, 1909; total membership, 9; average earnings per week, \$12; average earnings per hour, 28c.; number of working hours first five days, 50; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 72; general cause of idleness, slackness of work and between seasons;

total number (union and non-union) employed at trade in locality, male, 140; female, 150; difference in wages and hours of labour of those engaged at trade in locality between members and non-members of organization, members work less hours; cash benefits, sickness, \$5 per week; death, \$100; out of work benefits, dues remitted; body incorporated and registered. President, Adam Wilson, Box 623, Galt; Corresponding Secretary, Edwin Smith, Box 593, Galt; meets every 2nd Thursday in month.

Name,—Amalgamated Society of Engineers and Machinists, Branch No. 666. Organized November, 1903; total membership, 12; average earnings per week, \$12.38; average earnings per hour, 22½c.; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; no idle days; total number (union and non-union) employed at trade in locality, about 200; no difference in wages and hours of labour of those engaged at trade in locality between members and non-members of organization; cash benefits, sickness, \$2.50 per week; death \$60; superannuation, \$1.45 to \$2.50 per week; body is registered in England. President, William Oxtoby, Galt; Corresponding Secretary, Samuel Schofield, 1103 Galt P. O.; meets alternate Wednesdays.

Name,—International Association of Machinists, No. 120. Total membership, 47; average earnings per week, \$13; average earnings per hour, 23½c.; number of working hours first five days, 55; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 10; general cause of idleness, holidays; total number (union and non-union) employed at trade in locality, 400; no difference in wages or hours between members and non-members; cash benefits, sickness, \$4 per week; death, \$50 to \$250; out of work benefits, \$6 and \$8. President, A. D. Fulton, Box 772, Galt; Corresponding Secretary, J. E. Fulton, Box 772, Galt; meets every 2nd Monday in month.

Name,—International Moulders' Union, No. 447. Organized 1903; total membership, 65; average earnings per week, \$14; average earnings per hour, 25c.; number of working hours first five days, 50; wages paid fortnightly; average number of days idle per member during year, 30; general cause of idleness, sickness; total number (union and non-union) employed at trade in locality, 150; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, strike, \$7 per week; sickness, \$5.40 per week; death, from \$100 to \$200; out of work benefits, dues remitted for 13 weeks for one year. President, Jos. E. Kent, Galt; Corresponding Secretary, David Melvin, Box 356, Galt; meets 1st and 3rd Thursdays in month.

Name,—International Typographical Union, No. 411. Organized April, 1901; total membership, 13; average earnings per week, \$12; average earnings per hour, 27½c.; number of working hours first five days, 43; number on Saturday, 5; wages paid weekly and fortnightly; no idle days; total number (union and non-union) employed at trade in locality, 15; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, one shop works 54 hours per week, about \$10 per week paid; cash benefits, death, \$75; superannuation, \$4 per week after 60 years of age; body registered. President, Frank Donshell, Box 391, Galt; Corresponding Secretary, Arthur L. Phelps, 251 East Main Street, (Box 1010); meets 1st Tuesday in month.

GUELPH.

Name,—Journeymen Barbers' International Union, No. 310. Organized June 1, 1902; total membership, 15; average earnings per week, \$12; number of working

hours first five days, 48; number on Saturday, 13; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 15; cash benefits, sickness, \$5 per week; death, \$100 to \$300; body incorporated and registered. President, Frank Corrigan, 55 Cork Street; Corresponding Secretary, Jos. Egan, 77 Quebec Street; meets last Monday in month.

Name,—Bartenders' International League, No. 104. Organized October 13, 1901; total membership, 25; average earnings per week, \$12; average earnings per hour, 16½c.; number of working hours first five days, 70; number on Saturday, 12; wages paid monthly; average number of days idle per member during year, 10; general cause of idleness, sickness; total number (union and non-union) employed at calling in locality, 40; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 50c. per day; cash benefits, death, \$50. President, Wm. Mulroney, 12 Pearl Street, Guelph; Corresponding Secretary, Robert McCaw, 59 Norfolk Street, Guelph; meets 1st Friday in month.

Name,—Bricklayers' and Masons' Union, No. 3. Organized 1882; total membership, 51; average earnings per week, \$23.28; average earnings per hour, 28½c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly and fortnightly; average number of days idle per member during year, 90; general cause of idleness, winter months; total number (union and non-union) employed at trade in locality, 57; difference in wages or hours of labour of those engaged at trade in locality between members and non-members of organization, non-union men receive 42c. an hour for 9 hour day; union men 48½c. per hour for 8 hour day; cash benefits, death, \$200; have reading room. President, E. Simpson, George Street; Corresponding Secretary, H. L. Benallick, 77 Hearn Avenue; meets 2nd and 4th Thursday.

Name,—United Brewery Workers of America. Organized May 1, 1910; total membership, 14; average earnings per week, \$11; average earnings per hour, 17½c.; number of working hours first five days, 50 in summer; 45 in winter; number on Saturday, 5; wages paid fortnightly; general cause of idleness, decrease in trade; total number (union and non-union) employed at calling in locality, 29; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, non-union work longer hours, wages about the same; body registered. President, Antony Gruzleski, 68 Edinburgh Road; Corresponding Secretary, W. Golding, 73 Perth Street; meets 1st Thursday in month.

Name,—International Moulders' Union of North America, No. 212. Organized June 3, 1881; total membership, 100; average earnings per week, \$17.60; average earnings per hour, 35c.; number of working hours first five days, 47½; number on Saturday, 8½; wages paid weekly and fortnightly; general cause of idleness, slackness in trade; total number (union and non-union) employed at trade in locality, 90; difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization, piece workers in union shop make 20 per cent. more than others; cash benefits, sickness, \$5.40 per week; death, from \$100 to \$200; out of work benefits, strike, \$7 per week. President, H. Leadlay, 24 Oliver Street; Corresponding Secretary, Freeman W. Felker, 114 Northumberland Street; 1st and 3rd Fridays in month.

Name,—Brotherhood of Painters, Decorators and Paperhangers of America, No. 837. Organized September 17, 1910; total membership 13; average earnings per week, \$12; average earnings per hour 20c.; number of working hours first five days, 50; number on Saturday, 9; wages paid weekly; average number of days idle

per member during year, 84; general cause of idleness, bad trade; total number (union and non-union) employed at trade in locality, 36; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, death, \$300; body registered. President, George Dudley, 27 Ann Street; Corresponding Secretary, H. Smith, 105 Quebec Street; meets 1st and 3rd Tuesdays in month.

Name,—Piano and Organ Workers, No. 34. Organized June, 1902; total membership, 81; average earnings per week, \$12.10; average earnings per hour, 22c.; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 10; general cause of idleness, holidays; total number (union and non-union) employed at trade in locality, 225; no difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, sickness, \$5 per week for 10 weeks; death, \$50 to \$300. President, James Brohman, Kent Street, Guelph; Corresponding Secretary, Geo. Cutting, 127 Paisley St., Guelph; meets 3rd Thursday in month.

Name,—International Typographical Union, No. 391. Organized July, 1900; total membership, 29; average earnings per week, \$14; average earnings per hour, 33 1-3c.; number of working hours first five days, 42; number on Saturday, 6; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 29; no difference in wages or hours between members and non-members; cash benefits, death, 85; body incorporated. President, R. T. Knight, 578 Woolwich Street; Corresponding Secretary, C. E. Sarney, 76 Preston Street; meets 2nd Monday in month.

HAMILTON.

Name,—Journeymen Barbers' International Union of America, No. 131. Organized 1900; total membership, 96; average earnings per week, \$13.20; number of working hours first five days, 50; number on Saturday, 13; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 150; difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization, \$3 a week less for non-members; cash benefits, sickness, \$5 per week; death, \$75 to \$500. President, Wm. McEaid, 107 James Street North; Corresponding Secretary, H. J. Halford, 59 John Street South; meets 1st and 3rd Mondays in month.

Name,—Bartenders' International League of America, Local 197. Organized November, 1899; total membership, 111; average earnings per week, \$15; number of working hours first five days, 55; number on Saturday, 5; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 125; difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization, non-members receive \$5 less per week and work 4 hours per week more than members of organization; cash benefits, \$4 per week for 13 weeks; death, \$50; body incorporated and registered. President, George Hibberd, 123 James Street South; Corresponding Secretary, John Farr, 24 Barton Street East; meets 1st and 3rd Sundays in month.

Name,—International Union of Bricklayers, Masons and Plasterers, No. 1. Organized July 24, 1874; total membership, 267; average earnings per hour, 50c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly and fortnightly; general cause of idleness, bad weather and lack of material; total number (union and non-union) employed at trade in locality, 269, not in-

cluding apprentices; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 10c. to 15c. per hour, work 9 to 10 hours per day and all Saturday; cash benefits, sickness, optional; death, length of membership; daily papers and games for members during winter months. President, John Seamen, West Avenue; Corresponding Secretary, John T. Laing, 164 Robinson Street; meets every Thursday in month.

Name,—International Brotherhood of Bookbinders, Local 114. Organized April 18, 1902; total membership, 8; average earnings per week, \$14.50; average earnings per hour, 30c.; number of working hours first five days, 44; number on Saturday, 4; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality 15; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, death, \$75. President, John Glockling, 1 Jones Street; Corresponding Secretary, W. E. Monk, 120 Lock Street North; meets last Friday in month.

Name,—Boot and Shoe Workers' International Union, No. 444. Organized 1907; total membership, 28; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 15; general cause of idleness, sample time; total number (union and non-union) employed at trade in locality, 28; cash benefits, sickness, union, \$5; sick club, \$3; death, \$75. President, Wm. Harford, 206 Market Street; Corresponding Secretary, Wm. H. Hamilton, 180 George Street; meets 2nd Friday in month.

Name,—Boot and Shoe Workers' International Union, No. 234 (Female). Organized April 10, 1895; total membership, 80; average earnings per week, \$8; average earnings per hour, 18c.; number of working hours first five days, 45; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 12; general cause of idleness, stock taking; cash benefits, sickness, \$5 per week; death, \$100; out of work benefits, \$4 per week; body incorporated. President, Miss Nellie Sherriff, Y. W. C. A. Building, Main Street West; Corresponding Secretary, E. Copeland, 132 Markland Street; meets 4th Thursday in month.

Name,—Boot and Shoe Workers' International Union, No. 228. Organized November 3, 1900; total membership, 100; average earnings per week, piece work system; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year 7; general cause of idleness, stock taking; total number (union and non-union) engaged at trade in locality, male, 160; female, 8; differences in wages or hours of labour of those engaged at trade in locality, between members and non-members at organization, all are members of organization; sick benefits, sickness, \$8 per week; death, \$150; President, Joseph Gimblett, 73 Oxford Street; Corresponding Secretary, H. A. Harrison, 43 Melbourne Street; meets 3rd Tuesday in month.

Name,—Boot and Shoe Workers Int. Union, No. 232. Organized January, 1905; total membership, 31; average earnings per week, \$14.85; average earnings per hour, 27c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 21; general cause of idleness, slackness of trade and stock-taking; cash benefits, sickness, \$5 per week; death, \$100; body incorporated and registered. President, P. J. Kennedy, John St. North; Corresponding Secretary, E. Peters, 119 Peter St.; meets 4th Friday in month.

Name,—International Broom and Whisk Workers' Union, No. 9. Organized 1893; total membership, 15; average earnings per week, \$14; number of working hours first five days, 45; number on Saturday, $4\frac{1}{2}$; wages paid weekly; average number of days idle per member during year, 10; general cause of idleness, lack of material; total number (union and non-union) employed at trade in locality, 15; body registered. President, James Tetfield, 75 East Hunter St.; Corresponding Secretary, Wm. H. McAdam, 90 South Catharine St.; meets 2nd Monday in month.

Name,—Amalgamated Society of Carpenters and Joiners, No. 785. Organized June 4th, 1860; total membership, 118; average earnings per hour, 35c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; general cause of idleness, weather conditions; cash benefits, lack of employment, \$2.50 per week; sickness, \$3 per week; death, \$60; superannuation, \$2 per week. President, Archie Burton, 46 Garfield Ave.; Corresponding Secretary, F. H. Smith, 18 Ardvorlich St., Hamilton; meets alternate Mondays in month.

Name,—Brotherhood of Carpenters and Joiners of America, No. 18. Total membership, 98; average earnings per hour, 40c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; general cause of idleness, influx of mechanics; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 5c. to 10c. per hour, non-members working 9 to 10 hours per day; death benefits; body incorporated. President, Albert Blythe, 49 Wellington St. North; Corresponding Secretary, H. I. Sparks, 9 Delaware Ave., Hamilton; meets 1st and 3rd Tuesdays in month.

Name,—International Cigarmakers' Union, No. 55. Organized 1864; total membership, male, 250; female, 16; average earnings per week, male, \$13; female, \$13; average earnings per hour, piece-work; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 30; general cause of idleness, stock-taking; total number (union and non-union) employed at trade in locality, male, 250; female, 16; difference in wages or hours of labour of those employed in trade in locality, between members and non-members of organization, all are members of organization; cash benefits, sickness, \$5 per week; death, from \$50 to \$500; out of work, \$3 per week; body registered. President, C. J. Meadin, 11 McNeil St.; Corresponding Secretary, F. Hough, 170 Duke St.; meets 2nd Tuesday in month.

Name,—Order of Railway Conductors, No. 27. Organized April 2, 1881; total membership, 41; average earnings per week, \$21; average earnings per hour, 35c.; number of working hours first five days, $52\frac{1}{2}$; number on Saturday $10\frac{1}{2}$; wages paid monthly; average number of days idle per member during year, 25; general cause of idleness, depression in freight; total number (union and non-union) employed at trade in locality, 50; no difference in wages or hours between members and non-members; cash benefits, relief fund from \$6 to \$40 per month; death, amount of insurance from \$1,000 to \$3,000. President, E. C. Shepherd, 8 Locke St. South; Corresponding Secretary, A. Cameron, 297 York St.; meets 1st and 3rd Sundays in month.

Name,—Amalgamated Society of Engineers, No. 646. Organized Jan. 1, 1851; total membership, 80; average earnings per week, \$15; average earnings per hour, 25c. to 32c.; number of working hours first five days, 50; number on Saturday, 5 and 8; wages paid fortnightly; no idle days; cash benefits, sickness, \$2.50 per week; death, \$60; superannuation, \$1.75 to \$2.50 per week; out of work, \$2.50 per week; body incorporated and registered. President, S. Clarke, 64 Frances St., Hamilton;

Corresponding Secretary, R. C. Paterson, 187 Napier St., Hamilton; meets alternate Fridays in month.

Name,—Brotherhood of Locomotive Engineers, No. 133; total membership, 84; average earnings per week, \$25; average earnings per hour, 35c.; number of working hours first five days, various; same on Saturday; general cause of idleness, depression in traffic; total number (union and non-union) employed at trade in locality, 95; no difference in wages or hours of labour of those engaged at trade in locality between members and non-members of organization; cash benefits, insurance \$1,500; one man can carry three policies; body incorporated and registered. President, W. S. Stone, B. of L. E. Building, Cleveland, Ohio; Corresponding Secretary, A. A. Griffith, 81 Murray St. East, Hamilton; meets 2nd and 4th Sunday in month.

Name,—Canadian Association of Stationary Engineers, No. 2. Organized May, 1887; total membership, 50; average earnings per week, \$12.50; average earnings per hour, 22c.; number of working hours first five days, 55; number on Saturday, 10; wages paid weekly and fortnightly; the past year has been very good for engineers; special work for members, blackboard work every evening if possible; body incorporated. President, W. Lambuton, Park and Mulberry Sts., Hamilton; Corresponding Secretary, A. W. Heath, 111 Burns St., Hamilton; meets 2nd and 4th Thursdays in month.

Name,—Federal Labour Union (City Firemen), No. 11. Organized January, 1900; total membership, 54; wages paid fortnightly; total number (union and non-union) employed at calling in locality, 67; cash benefits, death, \$50. President, D. L. McCarthy, Park St. North; Corresponding Secretary, Jas. C. Hotrum, 251 Wellington St. North; meets 1st Monday in month.

Name,—Journeymen Horseshoers' Union, No. 72; total membership, 12; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly; total number (union and non-union) employed at trade in locality, 17; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, from \$1 to \$3, 5 hours per week; body incorporated and registered. President, William R. Allan, 132 Caroline St.; Corresponding Secretary, Albert Decker, 83 Smith Ave.; meets 2nd Wednesday in month.

Name,—Iron Moulders' Union of North America, No. 26. Organized July, 1860; total membership, 415; average earnings per week, \$15; average earnings per hour, 25c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly and fortnightly; general cause of idleness, dullness of trade; cash benefits, sickness, \$5.40 per week; death, \$100 to \$200. President, Henry Bourne, 54 Ferrie St. West; Corresponding Secretary, Jas. W. Ripley, 159 Mary St.; meets every Wednesday evening in the year.

Name,—Musicians' Protective Association, No. 93. Organized April 9, 1903; total membership, male, 200; female, 5; cash benefits, relief committee attends to all cases of sickness. President, A. J. Milligan, 81 Picton St. East, Hamilton; Corresponding Secretary, Jos. Gimblett, 73 Oxford St., Hamilton; meets 2nd Sunday in month.

Name,—Brotherhood of Painters, Decorators and Paperhangers of America, No. 205. Organized 1894; average earnings per week, \$12; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 30 to 40; general cause of idleness, increased immigration; difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of

organization, non-members of organization receive 25c. per hour and work 10 hours a day; cash benefits, death, \$50 to \$300; body incorporated. President, E. Parrson, 8 Adams St., Hamilton; Corresponding Secretary, F. J. Dunger, 362½ Bay North, Hamilton; meets 1st and 3rd Monday.

Name,—Pattern Makers' League of North America. Organized March, 1903; total membership, 42; average earnings per week, \$18; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly and fortnightly; total number (union and non-union) employed at trade in locality, 42; cash benefits, sickness, \$4 per week; death, \$50 to \$400. President, Chas. Young, 191 East Ave.; Corresponding Secretary, John Harrower, 40 St. Matthews Ave.; meets 1st and 3rd Thursdays in month.

Name,—Amalgamated Association of Sheet Metal Workers, No. 61; total membership, 50; average earnings per week, \$17.55; average earnings per hour, 32½c.; number of hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 55; general cause of idleness, wet, and winter weather, and slack season; total number (union and non-union) employed at trade in locality, 90; difference in wages or hours of labour of those engaged in trade in locality, between members and non-members of organization, about 12c. hour; cash benefits, sickness, dues remitted; out of work, just what local can give or as members are in need; death, \$100; special work, trade instruction in drafting; body incorporated and registered. President, H. Sheppard, 72 Robert St.; Corresponding Secretary, Geo. E. Farr, Hamilton Beach P.O.; meets first and third Friday each month.

Name,—International Alliance of Stage Employees, No. 129. Organized July, 1906; total membership, 32; average earnings per week, \$12; average earnings per hour, 30c.; number of working hours first five days, 30; number on Saturday, 12; wages paid weekly; average number of days idle per member during year, 90; general cause of idleness, close of theatres; total number (union and non-union) employed at calling in locality, 60; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, 40c.; body incorporated. President, Thomas McNab, 158 Barton St. East; Corresponding Secretary, George Elville, 405 Bay St. North, Hamilton; meets 4th Monday in month.

Name,—Journeymen Stonecutters' Association of North America. Organized 1885; total membership, 22; average earnings per week, \$21; average earnings per hour, 47½c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, weather conditions; total number (union and non-union) employed at trade in locality, 22; all are members of organization in locality; cash benefits, death, \$100; body registered. President, Thos. Harrison, Wood St., Hamilton; Corresponding Secretary, Geo. Campbell, 28 Fairleigh Ave. North; meets 2nd and 4th Thursday in month.

Name,—Stove Mounters' and Steel Range Mounters' International Union, No. 35; total membership, 10; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 9; wages paid fortnightly; general cause of idleness, slackness in trade; total number (union and non-union) employed at trade in locality, 10. President, Albert Reid, 33 Spring St.; Corresponding Secretary, Thos. Bevers, 35 Tisdale St., Hamilton; meets 1st Monday in month.

Name,—Amalgamated Association of Street and Electrical R. Employees of

America, Div. No. 107. Organized April, 1899; total membership, 130; average earnings per week, \$13; average earnings per hour, 20c.; number of working hours first five days, 55; number on Saturday, 11; wages paid fortnightly; no idle time; total number (union and non-union) employed at calling in locality, 200; cash benefits, sickness, \$3 per week; death, \$100 by International. President, George Cairns, 140 Wentworth St. South; Corresponding Secretary, H. R. Oakes, 287 Wellington St. North; meets 1st and 3rd Saturdays in month.

Name,—Tobacco Workers' International Union, No. 48; total membership, male, 105; female, 75; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly; total number (union and non-union) employed at trade in locality, male, 105; female, 75; work both by piece and day work; cash benefits, sickness, \$3 per week; death, \$50; body incorporated and registered. President, Thos. Finnagin, 128 Cannon St. West; Corresponding Secretary, A. H. Broughton, 22 Hunt St.; meets 2nd and 4th Monday in month.

Name,—Brotherhood of Railway Trainmen, No. 226. Organized 1886; total membership, 142; average earnings per week, \$14; average earnings per hour, 24c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 7; total number (union and non-union) employed at trade in locality, 100; no difference in wages or hours between members and non-members; cash benefits, sickness, 50c. per day; death, funeral expenses. President, H. J. Penton, 80 Poulette St.; Corresponding Secretary, R. L. Almas, 22 Baillie St.; meets 2nd and last Sunday in month.

Name,—International Typographical Union, No. 129. Organized September, 1869; total membership, 124; average earnings per week, \$17; average earnings per hour, 35½c.; number of working hours first five days, 43½; number on Saturday, job, 4½; news, 5; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 136; death benefit, \$75. President, James T. Bonner, "Herald" office; Corresponding Secretary, John J. Burns, 115 East Murray St.; meets 2nd Wednesday in month.

Name,—Wood, Wire and Metal Lathers, Local 145; total membership, 20; average earnings per week, \$16; average earnings per hour, 35c. to 45c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; general cause of idleness, cold weather; total number (union and non-union) employed at trade in locality, 25; difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization, 10c. per hour; cash benefits, death, \$100; body registered. President, James Bryer, Melbourne St., near Garth; Corresponding Secretary, James Gilchrist, 100 Merrick St.; meets 2nd and 4th Wednesday in month.

HAVELOCK.

Name,—Brotherhood of Locomotive Engineers, No. 658. Organized September, 1903; total membership, 38; average earnings per week, \$25; general cause of idleness, slackness in trade; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, superannuation, minimum, \$2,000; body incorporated and registered. President, T. Hartney, Havelock P.O.; Corresponding Secretary, Jno. Toman, Havelock P.O.; meets 2nd and 4th Monday in month.

Name,—Brotherhood of Railroad Trainmen, No. 293; total membership, 59; average earnings per week, conductors, \$27.64; trainmen, \$18.43; number of work-

ing hours first five days, work when called; wages paid monthly; no idle days; cash benefits, death, amount policy calls for; body incorporated and registered. President, J. J. Carter, Havelock; J. S. McWhorter, Smith's Falls; meets 2nd and 4th Thursday in month.

INGERSOLL.

Name,—International Brotherhood of Maintenance of Way Employees, No. 503; total membership, 25; average earnings per week, foremen, \$15.90; labourers, \$10; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 50; no difference in wages or hours between members and non-members; death benefits, \$250 to \$1,000. President, M. Spraggue, Ingersoll; Corresponding Secretary, D. McCord, Belmont; meets at call of President.

JACK FISH.

Name,—Maintenance of Way Employees. Organized 1892; total membership, 65; average earnings per week, \$10.20; average earnings per hour, 17c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; total number (union and non-union) employed at calling in locality, 200; difference in wages or hours of labour of those engaged at calling in locality, between members and non-members of organization, 10c. per day; body incorporated and registered. President, J. Lerwill, Heron Bay; Corresponding Secretary, A. Bianconi, Jack Fish, Ont.; meets last Saturday in month.

KENORA.

Name,—Brotherhood of Railway Carmen of America, No. 236; total membership, 40; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 47½; number on Saturday, 5; wages paid monthly; total number (union and non-union) employed at trade in locality, 40; no difference in wages and hours of labour of those engaged in locality between members and non-members. President, Dave Pike, P.O., Kenora; Corresponding Secretary, Wm. Jarrett, 4th St. North, Kenora; meets 3rd Friday in each month.

Name,—International Association Machinists, No. 28. Organized Feb. 11, 1907; total membership, 12; average earnings per week, \$22; average earnings per hour, 42½c.; number of working hours first five days, 45; number on Saturday, 9; wages paid monthly; total number (union and non-union) employed at trade in locality, 13; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, death, \$50 to \$300; out of work benefits, dues remitted. President, S. McLellan, Box 151, Kenora; Corresponding Secretary, James Douglas, Box 151, Kenora; meets 4th Monday in month.

KINGSTON.

Name,—Journeyman Barbers' International Union of America, No. 514. Organized April 17, 1903; total membership, 15; average earnings per week, \$12; average earnings per hour, 18¾c.; number of working hours first five days, 50; number on Saturday, 14; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 40; no difference in wages or hours of labour of those engaged at trade in locality, between members and non-members of organ-

ization; cash benefits, sickness, \$5 per week; death, \$75 to \$500; not incorporated or registered. President, Geo. Lewis, 346 Princess St., Kingston; Corresponding Secretary, W. J. Lemon, 377 King St.; meets last Monday in month.

Name,—United Brotherhood of Carpenters and Joiners, No. 249. Organized July, 1898; total membership, 68; average earnings per week, \$15; average earnings per hour, 31¼c.; number of working hours first five days, 40; number on Saturday, 8; wages paid fortnightly; average number of days idle per member during year, 45; general cause of idleness, inclement weather; total membership (union and non-union) employed at trade in locality, 85; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union men work 10 hours, and receive from 20c. to 31¼c.; cash benefits, sickness, \$3 per week; death, \$200; total disability, \$400; death of wife, \$50. President, J. Watts, 99 Stuart St.; Corresponding Secretary, W. H. Hubble, 26 Quebec St., Kingston; meets 2nd and 4th Mondays in month.

Name,—National Association of Marine Engineers, Council No. 4. Organized 1901; total membership, 120; average earnings per week, \$15 in winter, \$25 in summer; average earnings per hour 27 7-9c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly in winter; monthly in summer; average number of days idle per member during year, 52, for those who do not work in winter; general cause of idleness, slackness of work; total number (union and non-union) employed at trade in locality, 120; all are union in locality: have lectures during winter months. President, George Fleming, 2 Brewery Lane: Corresponding Secretary, James Gillie, 97 Clergy St. West, Kingston; meets every Monday during December, January, February and March.

Name,—Hodcarriers' and Builders' Labourers' Union, No. 66. Organized 1904; total membership, 100; average earnings per week, \$8; average earnings per hour, 28c.; number of working hours first five days, 40; number on Saturday, 8; wages paid fortnightly; average number of days idle per member during year, 120; general cause of idleness, winter weather; total number (union and non-union) employed at calling in locality, 150; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, non-union men work from 9 to 10 hours; union men 8 hours; cash benefits, death, \$50 to \$100. President, Edward McDonald, corner Bagot and Earl Sts., Kingston; Corresponding Secretary, A. C. Smith, 469 Division St., Kingston; meets 1st and 3rd Wednesdays in month.

Name,—International Association of 'Longshoremen, No. 229; total membership, 25; average earnings per week, \$10; average earnings per hour, 15c.; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; average number of days idle per member during the year, 90; general cause of idleness, slackness in trade; total number (union and non-union) employed at calling in locality, union, 25; non-union, 16. President, J. A. O'Neil, 272 Sydenham St.; Corresponding Secretary, W. Payne, 12 Ann St.; meets 2nd and 4th Mondays in month.

Name,—Masters' and Mates' Association; total membership, 70; average earnings, \$900 per annum; total number (union and non-union) employed at calling in locality, 70; club room for use of members during winter months. President, Captain Esford, Division St.; Corresponding Secretary, George Hunter, 298 Collingwood St.; meets weekly during winter months.

Name,—Amalgamated Sheet Metal Workers International Alliance, No. 117; total membership, 15; average earnings per week, \$15; number of working hours first 8 L.

five days, 45; number on Saturday, 9; wages paid weekly; general cause of idleness, slackness of work during winter months; total number (union and non-union) employed at trade in locality, 20; no difference in wages or hours between members and non-members; death benefit, \$100. President, Edward Ada, 9 Deacon St.; Corresponding Secretary, W. G. Hamilton, 302 Collingwood St.; meets 1st and 3rd Fridays in month.

Name,—International Moulders' Union, No. 252. Organized Feb. 25, 1899; total membership, 16; average earnings per week, \$15; average earnings per hour, 27 $\frac{1}{4}$ c.; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 21; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union 27 $\frac{1}{2}$ c., non-union 25c.; cash benefits, sickness, \$5.40 per week; death, \$100 to \$200; out of work benefits, dues remitted. President, William Holland, 103 Stuart St., Kingston; Corresponding Secretary, Jos. Clark, 181 Collingwood St., Kingston; meets 2nd and 3rd Mondays in month.

Name,—International Brotherhood of Painters, Decorators and Paperhangers, No. 114. Organized March 15, 1887; total membership, 32; average earnings per week, \$15; average earnings per hour, 27 7-9; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly; average number of days idle per member during year, 30; general cause of idleness, weather conditions; no difference in hours between members and non-members of organization, wages paid non-members not known; cash benefits, death, \$100 to \$300; body incorporated. President, B. Birmingham, Chartrain St.; Corresponding Secretary, W. T. Edgar, 16 Rideau St., Kingston; meets 1st and 3rd Mondays in month.

Name,—United Association of Plumbers, Gas and Steamfitters, No. 221; total membership, 25; average earnings per week, \$15.50; average earnings per hour, 27 $\frac{1}{2}$ c.; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly; average number of days idle per member during year, 30; cash benefits, sickness, \$5 per week; death, \$100; body incorporated. President, H. Lane, Colborne St., Kingston; Corresponding Secretary, C. Veale, 154 York St., Kingston; meets 1st and 3rd Tuesdays in month.

Name,—Lake Seamens' Union. Organized July, 1905; total membership, 200; average earnings per week, \$6 to \$11.50; wages paid monthly or at end of trip; average number of days idle per member during year, 120; general cause of idleness, close of navigation; total membership (union and non-union) employed at calling in locality, 400; difference in wages and hours of labor of those engaged at calling in locality, between members and non-members of organization, 50c. per day on sailing vessels; cash benefits, sickness, small weekly payment; death, \$75; \$30 for loss of clothing in wreck or fire; \$30 for disability benefit; have reading-room for use of members during winter months. President, Chairman, elected at each meeting; Corresponding Secretary, T. H. Fleming, Labour Hall, Kingston; meets each Monday in month.

Name,—Journeyman Stonecutters of North America. Organized 1888; total membership, 17; average earnings per week, \$21.60; average earnings per hour, 45c.; number of working hours first five days, 40; number on Saturday, 8; wages paid fortnightly; average number of days idle per member during year, 75; general cause of idleness, bad weather; death benefits, \$100. President, Hugh McBratney, 137 Bay St.; Corresponding Secretary, F. A. Monk, 24 Elm St.; meets 1st Tuesday in month.

Name,—Journeyman Tailors Union of America, No. 263. Organized June 1, 1901; total membership, male, 11; female, 19; average earnings per week, male, \$11; female, \$4.50; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly; average number of days idle per member during year, 75; general cause of idleness, lack of work; total number (union and non-union) employed at trade in locality, male, 25; female, 50; cash benefits, sickness, \$5 per week; death, \$100; body incorporated and registered. President, Robert Alexander, 451 Albert St., Kingston; Corresponding Secretary, Joseph Sauve, 29 Brock St., Kingston; meets 1st and 3rd Mondays in month.

Name,—International Typographical Union, No. 204; total membership, 22; average earnings per week, \$14; average earnings per hour, 30c.; number of working hours first five days, 43; number on Saturday, 5; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 25; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, about six hours per week; cash benefits, death, \$75. President, James Bennett, "Jackson Press"; Corresponding Secretary, W. Alan Stroud, 91 Rideau St., Kingston; meets 1st Tuesday in month.

LINDSAY.

Name,—Brotherhood Locomotive Engineers, Hope Div., No. 174. Organized 1882; total membership, 60; average earnings per week, \$25; wages paid monthly; total number (union and non-union) employed at trade in locality, 70; no difference in wages and hours of those engaged at calling in locality, between members and non-members of organization; cash benefits, sickness, 50c. per day; death, insurance; superannuation, age, 65; G. T. R. library for members; body incorporated and registered. President, Geo. Nursey, Melbourne St., Lindsay; Corresponding Secretary, Thos. Wilkinson, Box 205, Lindsay; meets 2nd and 4th Sundays in month.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 136. Organized January 13, 1883; total membership, 85; average earnings per week, \$14; average earnings per hour, 23c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 20; general cause of idleness, depression in business; total number (union and non-union) employed at calling in locality, 100; difference in wages or hours of labour of those engaged in calling in locality, between members and non-members of organization, none; cash benefits, death, \$500 up to \$3,000; special work, instruction classes on air brake, machinery and transportation rules; body incorporated and registered. President, A. M. Breslin, Russell St., P.O. Box 212; Corresponding Secretary, W. G. Graham, 38 Glenelg St. East, Box 212; meets 1st and 3rd Sundays each month.

Name,—Brotherhood of Locomotive Trainmen, Midland Lodge, No. 308; total membership, 94; average earnings per week, \$14; average earnings per hour, 24c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 40; general cause of idleness, depression in freight business; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, death, from \$500 to \$3,000; body incorporated and registered. President, S. Halpin, Box 528, Lindsay; Corresponding Secretary, A. R. McKay, Box 528, Lindsay; meets 2nd and 4th Sundays in month.

LONDON.

Name,—Journeymen Barbers International Union of America, No. 366; total membership, 40; average earnings, \$12 to \$14; number of working hours first five days, 44; number on Saturday, 14; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 60; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, \$1 to \$2 per week, in favour of union men, and about six hours per week in working time; cash benefits, sickness, \$5 per week; death, \$75 to \$500. President, John Frezell, 617 Dundas St.; Corresponding Secretary, J. E. Secker, 713 Richmond St.; meets 4th Monday in month.

Name,—Bartenders' International League, No. 137. Organized 1903; total membership, 52; average earnings per week, 14; number of working hours first five days, 6 and 10 hours every other day, six days per week; wages paid weekly; total number (union and non-union) employed at trade in locality, union, 52; non-union, 6; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union work at any wage; cash benefits, sickness, \$5 per week; death, \$50; body registered. President, George Parker, London House; Corresponding Secretary, H. G. Edsall, 58 Colborne St., London; meets 2nd and 4th Sundays in month.

Name,—International Alliance of Bill Posters, No. 22; total membership, 9; average earnings per week, \$12; wages paid weekly; no idle days; total number (union and non-union) employed at calling in locality, 9; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, no difference in hours, but six receive \$12 per week, three receive \$10 per week; body incorporated. President, William Cooney, Queen's Ave.; Corresponding Secretary, Chas. L. Vincent, 673 Lorne Avenue; meets 2nd Sunday in month.

Name,—Boilermakers and Iron Ship Builders and Helpers' International Union, No. 203. Organized May 4, 1899; total membership, 22; average earnings per week, \$18 to \$19.80; average earnings per hour, 33c.; number of working hours first five days, 50; number on Saturday, 5 to 10; wages paid weekly and monthly; no idle days; total number (union and non-union) employed at trade in locality, 40; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union receive 23c. to 25c. per hour; no standard; cash benefits, death, \$100; out of work benefit, dues are remitted; body incorporated and registered. President, Wm. Stinson, 895 Elias St., London; Corresponding Secretary, Harry Nibbler, 811 Central Ave., London; meets 2nd and 4th Wednesday in month.

Name,—Boot and Shoe Workers' International Union, No. 88. Organized Oct. 17, 1910; total membership, male, 60; female, 30; average earnings per week, piece-work; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 14; general cause of idleness, stock-taking; total number (union and non-union) employed at trade in locality, male, 140; female, 66; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union men receive better wages than non-union; hours of labour the same; cash benefits, sickness, \$5 per week; death, \$100. President, S. Gollant, care Cook, Fitzgerald Shoe Co.; Corresponding Secretary, Edgar V. Lucas, 409 Ridout St.; meets 2nd and 4th Thursdays in month.

Name,—International Union of United Brewery Workmen, No. 381. Organized May 1, 1910; total membership, 109; number of working hours first five days, 50; number on Saturday, 9; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 109; out of work benefits, dues remitted; body incorporated and registered. President, R. H. Annett, St. Patrick St.; Corresponding Secretary, Arthur Jackson, 11 St. Patrick St.; meets 2nd Thursday in month.

Name,—Bricklayers' and Masons' International Union, No. 5, Ontario. Organized October, 1882; total membership, 55; average earnings per week, \$11; average earnings per hour, 45c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 175; general cause of idleness, winter weather, and dulness in trade; total number (union and non-union) employed at trade in locality, 65; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union work 9 hours; wages from 30c. to 45c.; cash benefits, death, \$100 to \$200. President, C. E. Holliday, 130 Clarence St.; Corresponding Secretary, Frank Pierce, 687 Princess Ave.; meets 2nd and 4th Wednesdays in month.

Name,—Amalgamated Society of Carpenters and Joiners, No. 783. Organized June, 1860; total membership, 20; average earnings per week, \$13.86; average earnings per hour, 28c.; number of working hours first five days, 45; number on Saturday, 4½; wages paid weekly; average number of days idle per member during year, 40 to 60; general cause of idleness, lack of work and inclemency of weather; total number (union and non-union) employed at trade in locality, 300; no difference in wages or hours between members and non-members; cash benefits, sickness, \$3 per week; death, \$60; superannuation, \$2 per week; out of work benefit, \$2.50 per week. President, A. Ellis, 20 Alexander St.; Corresponding Secretary, John Tanton, 379 Waterloo St.; meets 2nd and 4th Wednesdays in month.

Name,—United Brotherhood of Carpenters and Joiners, No. 1946. Organized Nov. 4, 1907; total membership, 16; average earnings per week, \$13.36; average earnings per hour, 27c.; number of working hours first five days, 45; number on Saturday, 4½; wages paid weekly; number of days idle per member during year, 30; general cause of idleness, inclement weather and dulness in building trade; total number (union and non-union) employed at trade in locality, 300; cash benefits, death, \$200. President, R. Pring, 702 Maitland St.; Corresponding Secretary, W. Mitchell, 1055½ Dundas St.; meets 1st Monday in month.

Name,—Federated Association of Letter Carriers, No. 4. Organized 1890; total membership, 33; average earnings per week, \$16.50; maximum, \$2.75 per day; minimum, \$1.75 per day; wages paid fortnightly; average number of days idle per member during year, few, unless sick; general cause of idleness, suspension or sickness; Government is trying to regulate the hours to eight per day; cash benefits, some have superannuation fund, others have retirement fund. President, Chester Fitzgerald, 161 Princess Ave., London; Corresponding Secretary, W. M. Empey, 573 Oxford St., London; meets 1st Tuesday in month.

Name,—Cigarmakers' International Union, No. 278. Organized 1891; total membership, male, 297; female, 47; average earnings per week, male, from \$9 to \$12; female, from \$9 to \$12; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; total number (union and non-union) employed at trade in locality, 1,000; non-union men receive lower wages; cash benefits, sickness, \$5 per week; death, \$50 to \$500; out of work benefit, \$3 per week; body incorporated

and registered. President, Tim Delaney, Waterloo St.; Corresponding Secretary, Wm. Heslop, 93 Albion St.; meets 1st and 3rd Tuesdays in month.

Name,—International Brotherhood of Electrical Workers, No. 120. Organized Feb. 23, 1907; total membership, 18; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; total number (union and non-union) employed at calling in locality, 150; death benefit, \$100; no special work for members; body incorporated and registered. President, E. Inglis, 85 Clarence St.; Corresponding Secretary, C. Thayer, 787 Lorne Ave.; meets 2nd and 4th Thursdays in month.

Name,—Amalgamated Society of Engineers, No. 577. Organized 1851; total membership, 16; average earnings per week, \$13.75; average earnings per hour, 25c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly and monthly; average number of days idle per member during year, 60; general cause of idleness, economising; total number (union and non-union) employed at trade in locality, 200; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 2½c. per hour; cash benefits, sickness, \$2.50 per week; death, \$60; superannuation, \$1.75 to \$2.50; accident benefit, \$500; lack of employment, \$2.50 per week; body registered. President, Alex. McDonald, 867 Waterloo St.; Corresponding Secretary, Geo. H. Scollick, 583 Grey St., London; meets every 2nd Friday dating from January 6th.

Name,—Brotherhood of Locomotive Engineers, No. 68. Organized 1868; total membership, 48; average earnings per week, \$25; average earnings per hour, pro rata; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 15; general cause of idleness, depression in business; total number (union and non-union) employed at calling in locality, 60; no difference in wages or hours between members and non-members; death benefits, \$750 to \$4,500. President, James Porteous, 374 York St.; Corresponding Secretary, John Gurney, 125 Inkerman St., London.

Name,—Canadian Association of Stationary Engineers, No. 30. Organized June, 1907; total membership, 81; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 100; no difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization; have reading-room, evening classes; body incorporated. President, Geo. Fowler, Gregg House, London; Corresponding Secretary, J. R. Stephenson, 37 Egerton St.; meets 2nd and 4th Tuesdays in month.

Name,—Brotherhood Locomotive Firemen and Enginemen, Ontario Lodge, No. 468. Organized August 29, 1891; total membership, 54; average earnings per week, \$20; average earnings per hour, 27c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; total number (union and non-union) employed at trade in locality, 61; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, death, \$500 to \$3,000; body incorporated and registered. President, Geo. H. Trace, 220 Burwell St., London; Corresponding Secretary, Chas. Phipps, 626 Lorne Ave., London; meets 2nd and 4th Tuesdays in month, at 2 p.m.

Name,—United Garment Workers of America, No. 33; total membership, male, 6; female, 50; average earnings per week, male, \$18; female, \$9; number of working hours first five days, 45; number on Saturday, 4; wages paid weekly; average num-

ber of days idle per member during year, 30; total number (union and non-union) employed at trade in locality, male, 275; female, 400; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union shops work 46½ hours, non-union, 49; union wages, 20 per cent. higher. President, Miss M. McDonald, 169 John St.; Corresponding Secretary, A. H. Carroll, 204 Sydenham St.; meets 4th Friday in month.

Name,—International Association of Granite Cutters of America. Organized August, 1906; total membership, 4; average earnings per week, \$18; average earnings per hour, 37½c; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 26; general cause of idleness, depression in trade; total number (union and non-union) employed at trade in locality, 5; no difference in wages or hours between members and non-members; cash benefits, death, \$200; body incorporated and registered. President, W. Cunningham, 145 Clarence St., London.

Name,—International Brotherhood of Maintenance of Ways Employees, No. 195. Organized 1901; total membership, 120; average earnings per week, \$12; average earnings per hour, 17c.; number of working hours first five days, 90; number on Saturday, 10; wages paid monthly; general cause of idleness, reduction in force; total number (union and non-union) employed at calling in locality, 150; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, superannuation, at the age of 65, a pension of \$20 per month; body incorporated and registered. President, D. Stallard, 830 Elias St., London; corresponding Secretary, D. H. Walsh, 381 Central Ave., London; meets last Saturday in month.

Name,—American Federation of Musicians, No. 279. Organized Feb. 2, 1903; total membership, male, 130; female, 10. President, Harry Woostie, 310 Wharncliffe Road; Corresponding Secretary, C. N. Perrin, 352 Adelaide St., London; meets 4th Sunday in month.

Name,—United Association of Plumbers, Gas and Steamfitters, No. 289. Organized January, 1907; total membership, 15; average earnings per week, \$15; average earnings per hour, 35c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 25; general cause of idleness, scarcity of work; total number (union and non-union) employed at trade in locality, 25; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, about 10c. per hour; cash benefits, sickness, \$5 per week; death, \$100. President, J. Mitchell, Richmond St. North; Corresponding Secretary, Geo. F. Avey, 189 Waterloo St., London; meets 1st and 3rd Tuesdays in month.

Name,—Printing Pressmen and Assistants International Union, No. 173. Organized October, 1908; total membership, 33; number of working hours first five days, 40; number on Saturday, 4½; wages paid weekly; total number (union and non-union) employed at trade in locality, 33; difference in wages and hours of those engaged at trade in locality, between members and non-members of organization, non-union, 55 hours; union, 48; cash benefits, death, pressmen, \$100; assistants, \$75. President, George Flory, 256 Grosvenor St.; Corresponding Secretary, H. Smith, 642 Marshall St., London; meets 1st Saturday in month.

Name,—Order of Railway Telegraphers, No. 7. Total membership, 100; average earnings per week, \$13.75; average earnings per hour, 15c.; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; no idle days; total number (union and non-union) employed at trade in locality, 102; no differ-

ence in wages or hours between members and non-members; death benefits, \$300, \$500, \$1,000. President, A. E. Chapman, 265 Piccadilly St., London; Corresponding Secretary, G. Elliott, 368 Dundas St., London; meets 3rd Saturday in month.

Name,—Brotherhood of Railway Trainmen, Forest City Lodge, No. 240. Organized 1883; total membership, 72; average earnings per week, \$15 to \$17; average earnings per hour, 22 2-3c.; number of working hours first five days, 75; number on Saturday, 15; wages paid monthly; average number of days idle per member during year, 42; general cause of idleness, trains not running; total number (union and non-union) employed at calling in locality, 98; no difference in wages and hours of labour of those engaged at calling of locality, between members and non-members of organization; cash benefits, death, \$500, \$1,000, \$1,350. President, W. J. Day, 892 Queen's Avenue East, London; Secretary, W. Harris, 27 Victor St., London; meets 1st and 3rd Sundays.

Name,—Brotherhood Railroad Trainmen, London Lodge, No. 415. Organized July 13th, 1891; total membership, 188; average earnings per week, \$22 to \$32; number of working hours irregular; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 193; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, sickness, have Board of Relief; death, \$500 to \$1,350; body registered. President, Peter Kelleher, 51 Palace Street, London; Corresponding Secretary, W. H. Nichol, 896 Princess Avenue, London; meets 2nd and 4th Sundays in month.

Name,—International Alliance of Theatrical Stage Employees, No. 105. Organized August, 1903; total membership, 25; average earnings per week, \$12; average earnings per hour, 25c.; number of working hours first five days, 30; number on Saturday, 12; wages paid weekly; average number of days idle per member during year, 75; general cause of idleness, theatres closed; body incorporated. President, W. J. Newman, Wilson Avenue West; Corresponding Secretary, R. E. Whitton, 135 Albert Street, London; meets 1st and 3rd Sundays in month.

Name,—Telegraphy, covering Grand Trunk System, Division No. 1. Organized 1898; average earnings per week, male, \$15; female, \$15; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; no idle days; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, death, insurance, which is optional. President, B. J. Rowell, 158 Fairfield Street, Woodfords Station, Maine; Corresponding Secretary, D. L. Shaw, 427 William Street, London; meets at call of President.

Name,—International Typographical Union, No. 133. Organized November, 1869; total membership, 58; average earnings per week, \$15; average earnings per hour, 33 1-3; number of working hours first five days, news, 40, job, 43½; number on Saturday, news, 8, job 41½; wages paid weekly; total number (union and non-union) employed at trade in locality, male, 125; female, 12; difference in wages and hours of those engaged at trade in locality, between members and non-members of organization, union wages is \$13 to \$22 per week, non-union from \$8 up; union hours 48 per week; non-union, 54 per week; cash benefits, sickness, \$5 per week; death, \$75; superannuation, \$4 per week; have technical school now in connection with International Union. President, A. C. Flowers, cor. William and Pall Mall Streets, London; Corresponding Secretary, W. O. Ruse, 14 Walnut Street, London; meets 1st Saturday in month.

MIDLAND.

Name,—International Longshoremen's Association, No. 19. Organized August 1, 1900; average earnings per week, irregular; average earnings per hour, 40c.; number of working hours irregular; wages paid whenever job is finished; average number of days idle per member during year, irregular; general cause of idleness, irregularity of work; total number (union and non-union) employed at calling in locality, 100; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, about 15c. President, George McMullen, Midland; Corresponding Secretary, D. A. Hall, Midland; meets 1st and 3rd Tuesdays in month.

MILVERTON.

Name,—International Brotherhood of Maintenance of Ways Employees, No. 163. Organized 1886; total membership, 30; average earnings per week, from \$9 to \$15.30; average earnings per hour, 15c. to 25½c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 45; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, death, \$500 to \$1,000; superannuation, \$20 per month paid by C. P. R.; body incorporated and registered. President, T. A. Netterfield, West Monkton; Corresponding Secretary, J. J. Elliott, Milverton; meets 1st Friday in each month.

NIAGARA FALLS.

Name,—Amalgamated Society of Carpenters and Joiners, No. 793; total membership, 34; average earnings per week, \$19; average earnings per hour, 40c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; average number of days idle per member during year, 50; general cause of idleness, bad weather; total number (union and non-union) employed at trade in locality, 250; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 5c. to 15c. per hour; cash benefits, sickness, \$3 per week; death, \$60; superannuation, \$2 per week; tool benefit up to \$100; accident benefit, \$500. President, W. H. Leake, 629 Elmwood Avenue, Niagara Falls, N.Y.; Corresponding Secretary, Wm. Broomhall, 45 McGrail Avenue, Niagara Falls, Ont.; meets alternate Fridays.

Name,—United Brotherhood of Carpenters and Joiners, No. 713. Organized July, 1896; total membership, 170; average earnings per week, \$19.20; average earnings per hour, 40c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; average number of days idle per member during year, 36; general cause of idleness, severe winter weather; total number (union and non-union) employed at trade in locality, 180; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 5c. to 10c. per hour; cash benefits, death, \$100 to \$200; for wife, \$25 to \$50; total disability, \$100 to \$400; special work for members, blackboard instruction on trade problems. President, William Faurst, Park Street; Corresponding Secretary, Tom Moore, Box 419, Niagara Falls South; meets every Wednesday in month.

Name,—International Union of Steam Engineers, No. 232. Total membership, 50; average earnings per week, \$21; average earnings per hour, 35c.; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 50; reading room for use of members. President, J. A. McPherson, The Alexander House, Ferry Road; Corresponding Secretary, Geo. Aseltine, 55 Lundy's Lane; meets 2nd and 4th Fridays in month.

Name,—Journeyman Stonecutters' Association of North America. Total membership, 25; average earnings per hour, 50c.; number of working hours first five days, 40; number on Saturday, 8; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, cold weather and lack of work; total number (union and non-union) employed at trade in locality, 25; no difference in wages or hours between members and non-members; death benefits, \$100. President, Jas. Gousell, Thorold; Corresponding Secretary, Ed. Garnell, 62 Morrison Street; meets 4th Monday in month.

Name,—Brotherhood of Railroad Trainmen, No. 379. Total membership, 73; average earnings per week, \$25; wages paid monthly; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, death, regular insurance; body incorporated and registered. President, Jas. Collins, Bridge Street, Niagara Falls; Corresponding Secretary, A. E. Savage, 26 St. Lawrence Street; meets 1st and 4th Tuesdays in month.

NORTH BAY.

Name,—Brotherhood of Railway Carmen of America, No. 192. Organized 1900; total membership, 90; average earnings per week, \$11.50; average earnings per hour, 21c.; number of working hours first five days, summer, 10 hours; winter, 9 hours; number on Saturday, summer, 5; winter, 9; wages paid monthly; average number of days idle per member during year, 9; general cause of idleness, reduction of staff; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, 5 hours per week; body incorporated and registered. President, L. W. Wilson, North Bay Post Office; Corresponding Secretary, R. Rowe, North Bay Post Office; meets 4th Friday in month.

Name,—Order of Railway Conductors, No. 242. Total membership, 71; average earnings per week, \$20; number of working hours first five days, 40; number on Saturday, 8; wages paid monthly; average number of days idle per member during year, 27; general cause of idleness, slack season; total number (union and non-union) employed at calling in locality, 200; no difference in wages or hours between members and non-members; death benefits, \$1,000, \$2,000, \$3,000. President, Chas. Harrison, North Bay; Corresponding Secretary, A. Brown, Box 161, North Bay; meets 2nd and 4th Mondays in month.

Name,—Brotherhood of Locomotive Engineers, No. 308. Organized 1887; total membership, 88; average earnings per week; mileage basis; average earnings per hour, mileage basis; wages paid monthly; general cause of idleness, depends upon general condition of trade throughout the country; total number (union and non-union) employed at trade in locality, 110; no difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization; cash benefits, superannuation after 65 years. President, Wm. Hallandal;

Corresponding Secretary, Thomas W. Turner, 183 McIntyre Street West; meets 1st and 3rd Mondays at 2 p.m..

Name,—International Brotherhood of Maintenance of Way Employees, No. 244. Organized September, 1900; total membership, 151; average earnings per week, \$12.60; average earnings per hour, 19 4-5c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, union, 151; non-union, 300; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, hours of labour same; 20c. per day less for non-union labour; body incorporated and registered. President, A. E. Partuchek, Warren, Ont.; Corresponding Secretary, D. C. Wilson, Mattawa, Ont.; meets last Saturday in month.

Name,—Order of Railroad Telegraphers, Div. 99. Organized July 1, 1907; total membership 65; average earnings per week, varies; average earnings per hour, varies; number of working hours first five days, 60 for operators, 40 for dispatchers; number on Saturday, 12 for telegraphers, 8 for dispatchers; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 66; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; body incorporated and registered. President, J. J. Campbell, North Bay; Corresponding Secretary, R. Workman, Box 969, North Bay; meets at call of President.

Name,—Brotherhood of Railway Trainmen, No. 249. Organized September 23rd, 1883; total membership, 185; average earnings per week, 18c.; average earnings per hour, 25c.; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; average number of days idle per member during year, 80; general cause of idleness, sickness; total number (union and non-union) employed at trade in locality, 250; no difference in wages or hours between members and non-members; body incorporated and registered. President, W. G. Lee, American Trust Building, Cleveland, Ohio; Corresponding Secretary, J. W. Barker, Box 535, North Bay; meets 2nd and 4th Thursdays in month.

ORANGEVILLE.

Name,—International Brotherhood of Maintenance of Way Employees, No. 214. Organized 1901; total membership, 250; average earnings per week, \$13; average earnings per hour, 21c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 300; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; cash benefits, superannuation, \$20 per month; body incorporated and registered. President, R. B. McIntosh, Owen Sound; Corresponding Secretary, D. McDougall, Fergus; meets last Saturday in March, June, September and December.

OSHAWA.

Name,—United Brotherhood of Carpenters and Joiners, No. 1279. Organized November, 1910; total membership, 40; average earnings per week, \$13.50; average earnings per hour, 22½c.; number of working hours first five days, 50; number on Saturday, 9; wages paid weekly; average number of days idle per member during

year, 3 months; general cause of idleness, cold weather; total number (union and non-union) employed at your trade in locality, 75; difference in wages or hours of labour of those engaged in trade in locality, between members and non-members of organization, none; cash benefits, death, \$400; out of work, \$10 per week; body incorporated and registered. President, John Walker, Oshawa; Corresponding Secretary, W. J. Fry, Oshawa; meets 2nd and 4th Wednesdays in each month.

Name,—International Moulders' Union, No. 136. Organized July, 1852; total membership, 13; average earnings per week, \$15; average earnings per hour, 25c.; number of working hours first five days, 50; number on Saturday, 9; wages paid weekly and fortnightly; no idle days; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5.40 per week; death, \$100; out of work benefits, dues, remitted. President, Archie Robinson, Oshawa; Corresponding Secretary, R. H. Rogan, Box 512, Oshawa; meets 3rd Thursday in month.

Name,—Patternmakers League of North America. Organized March 16, 1908; total membership, 7; average earnings per week, \$12 to \$16.50; average earnings per hour, 20c. to 27½c.; number of working hours first five days, 50; number on Saturday, 9; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 30; cash benefits, sickness, \$4 per week; death, \$50 to \$400. President, Norman Stewart, South Oshawa Post Office; Corresponding Secretary, John Butchart, Box 643, Oshawa; meets 1st and 3rd Thursdays in month.

OTTAWA.

Name,—Bricklayers' Union of Ontario, No. 7. Organized 1889; total membership, 119; average earnings per week, \$12.80; average earnings per hour, 52c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 203; general cause of idleness, inclement weather; total number (union and non-union) employed at trade in locality, 179; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union work from 8 to 9 hours, and receive from 5c. to 7c. less than members of organization; cash benefits, death, \$100 to \$200. President, Richard Reardon, 89 Lloyd Street, Ottawa; Corresponding Secretary, Alex. Findlay, Jr., 313 Sunnyside Avenue, Ottawa; meets 2nd Monday in month.

Name,—Bricklayers', Masons' and Plasterers' International Union, No. 14, Ontario. Organized 1899; total membership, 116; average earnings per week, \$25; average earnings per hour, 50c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 130; general cause of idleness, bad weather and depression of trade; total number (union and non-union) employed at trade in locality, 130; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 10c. to 20c. per hour, and 4 hours Saturday afternoon in favor of members; cash benefits, death, \$100 to \$200. President, John Cameron, 74 Lloyd St.; Corresponding Secretary, M. Fleury, 214 Patterson Ave.; meets alternate Mondays in month.

Name,—Amalgamated Society of Carpenters and Joiners, No. 794. Organized June, 1860; total membership, 30; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid fortnightly; average days idle per member during year, 10; general cause of idleness, bad trade, bad weather; total number (union and non-union) em-

ployed at trade in locality, about 70; difference in wages and hours of labour of those employed in trade in locality, between members and non-members of organization, about 10c. to 15c. per hour in wages; and 10 hours per week; cash benefits, lack of employment, \$2.50 per week; sickness, \$3 per week; death, \$60; superannuation. \$1.75 to \$2 per week. Incorporated. President, Joseph Wardroff, 278 Bay St., Ottawa; Secretary, Peter McAnish, 105 Third Ave.; meets 1st and 3rd Thursdays.

Name,—United Brotherhood of Carpenters and Joiners of America, No. 93. Organized February, 1905; total membership, 99; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly and fortnightly; average number of days idle per member during year, 30; general cause of idleness, climatic and slackness; total number (union and non-union) employed at trade in locality, 500; cash benefits, death, \$200; \$50 for wife's death; and disability, \$100 to \$400. President, Louis Bloum, 275 Breeze Hill Ave., Ottawa; Corresponding Secretary, Emery Belair, 267 Clarence St.; meets 2nd and 3rd Wednesdays in month.

Name,—Order of Railway Conductors (Randolph Division), No. 29; total membership, 88; average earnings per week, \$30; wages paid monthly; total number (union and non-union) employed at calling in locality, 125; no difference in wages or hours between members and non-members; cash benefits, death, \$1,000, \$2,000, \$3,000. President, J. Marsh, 191 Pretoria Ave.; Corresponding Secretary, J. B. Morris, 305 Bronson Ave., Ottawa; meets 2nd and 4th Sundays in month.

Name,—Brotherhood of Locomotive Engineers, No. 168. Organized September, 1882; total membership, 104; average earnings per week, \$30; average earnings per hour, 39c.; number of working hours first five days, mileage basis; number on Saturday, mileage basis; wages paid monthly; no idle days; all are members of organization; no difference in wages or hours between members and non-members; cash benefits, death, Brotherhood insurance. President, E. D. Towsley, 161 Nepean St., Ottawa; Corresponding Secretary, J. G. Chisholm, 35 Lett St., Ottawa; meets 2nd and 4th Sunday in month.

Name,—Brotherhood of Locomotive Enginemen and Firemen, No. 172; total membership, 76; wages paid monthly; general cause of idleness, slack business on road; total number (union and non-union) employed at calling in locality, 110; no difference in wages or hours between members and non-members; death benefit, fair value policy; body incorporated and registered. President, H. E. White, 15 Spadina Ave.; Corresponding Secretary, Thos. A. Smyth, 39 Maple St.; meets 2nd and 4th Fridays in month.

Name,—Federal Union (Gas Stokers), No. 9. Organized Jan. 4th, 1910; total membership, 16; average earnings per week, \$16; average earnings per hour, 19c.; number of working hours first five days, 60; number on Saturday, 12; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 16; no difference in wages or hours between members and non-members; cash benefits, sickness, 75c. a day after 7 days; body incorporated. President, J. McKibban, 500 McLeod St.; Corresponding Secretary, J. Read, 339 King Edward Ave.; meets Tuesdays and Fridays.

Name,—International Hodcarriers' and Builders' Labourers' Union, No. 4; total membership, 170; average earnings per week, \$12.80; average earnings per hour, 28c.; number of working hours first five days, 40. number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 50; general cause of idleness, inclement weather; total number (union and non-union) employed at trade in locality, 400; difference in wages and hours of labour of those

engaged at trade in locality, between members and non-members of organization, non-union, 18c., 20c., and 25c. per hour, 10 hours a day, 6 days a week; cash benefits, death, \$100; body incorporated and registered. President, T. Howlett, 15 Hill St., Ottawa; Corresponding Secretary, C. Plumb, 310 Gladstone Ave., Ottawa; meets 2nd and 4th Tuesdays in month.

Name,—International Association of Machinists, No. 412. Organized 1904; total membership, 60; average earnings per week, \$16.50; average earnings per hour, 27½c; number of working hours first five days, 50; number on Saturday, 9 in winter, and 5 in summer months; wages paid fortnightly; average number of days idle per member during year, 25; general cause of idleness, slackness of work; total number (union and non-union) employed at trade in locality, 200; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union men get from 27½c. to 33c.; non-union from 20c. to 27c. per hour; death benefit, \$250; superannuation, \$500; out of work benefits, strike, married men receive \$8 per week; single men, \$6 per week; monthly journal contains educational and technical course; body incorporated and registered. President, Ben. E. Newman, 65 Anderson St., Ottawa; Corresponding Secretary, Henry E. Roche, 75 Elm St., Ottawa; meets 2nd and 4th Fridays in month.

Name,—International Moulders' Union, No. 280. Organized October, 1891; total membership, 31; average earnings per week, \$16.50; average earnings per hour, 27½c.; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; general cause of idleness, depression in trade; total number (union and non-union) employed at trade in locality, 50; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, from 10c. to 50c. less a day, same number of hours; cash benefits, sickness, \$5.40 a week; death, \$100 to \$250; out of work benefits, weekly dues. President, William McEwen, 11 Louisa St., Ottawa; Corresponding Secretary, J. E. Bedard, 155 Alma St., Hull, Que.; meets 1st and 3rd Thursdays in month.

Name,—Painters', Decorators' and Paperhangers' International Union, No. 200. Organized October 9, 1890; total membership, 100; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly and fortnightly; average number of days idle per member during year, 30; general cause of idleness, cold weather and lack of building operations; total number (union and non-union) employed at trade in locality, 200; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-members work 60 hours per week, and receive from 20c. to 25c. per hour; cash benefits, death, \$50 to \$300; body incorporated. President, A. Rudd, 318 Sunnyside Ave.; Corresponding Secretary, E. C. Brandt, 57 Bayswater Ave.; meets 1st and 3rd Wednesdays in month.

Name,—International Brotherhood of Paper Makers, No. 34. Organized June 18, 1910; total membership, 50; average earnings per week, \$15; average earnings per hour, 25c.; number of working hours first five days, 40; number on Saturday, 8; wages paid fortnightly; no idle days; death benefits, \$50 to \$300; body incorporated and registered. President, Albert Biage; Corresponding Secretary, Archie Hickman, 28 Bridge St., Hull; meets 2nd and 4th Sundays in month.

Name,—International Photo-Engravers' Union, No. 44. Organized March, 1910; total membership, 10; number of working hours first five days, 43¾; number on Saturday, 4¼; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 10; cash benefits, tuberculosis benefit, \$10

per week; death, \$100; body incorporated. President, E. B. Shore, 262 Kent St.; Corresponding Secretary, Arthur Miles, 108 Goulbourne Ave.; meets 1st Monday in month.

Name,—Operative Plasterers' International Association, No. 124. Organized Nov. 18, 1908; total membership, 76; average earnings per week, \$20; average earnings per hour, 40c.; number of working hours first five days, 45; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 30 to 60; general cause of idleness, slackness and frost; total number (union and non-union) employed at trade in locality, 100; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 5c. to 15c. less per hour for non-members; cash benefits, death, \$50 to \$200; body registered. President, Thomas H. Jarvis, 18 Fourth Ave.; Corresponding Secretary, John Herdman, 181 Creighton St.; meets 1st and 3rd Tuesdays in month.

Name,—Plasterers' Labourers' Union, No. 1. Organized November, 1909; total membership, 42; average earnings per week, \$12; average earnings per hour, 25c.; wages paid fortnightly; average number of days idle per member during year, 60; general cause of idleness, lack of work; total number (union and non-union) employed in trade in locality, 150; difference in wages and hours of labour of those employed in trade in locality, between members and non-members of organization, union get 27½c., non-union get 25c. per hour; cash benefits, death, \$1 assessments on each member. President, John Robertson, 70 Victoria St., Ottawa; Corresponding Secretary, A. Bethell, Westbro P.O., Ottawa; meets 2nd and 4th Thursdays in month.

Name,—Plumbers' and Steam Fitters' Union, No. 71; total membership, 142; average earnings per week, \$19 to \$23; average earnings per hour, 39c. to 43c.; number of working hours first five days, 45 in summer, 40 in winter; number on Saturday, 5 in summer, 4 in winter; wages paid weekly and fortnightly; average number of days idle per member during year, 60; general cause of idleness, slackness of work in winter; cash benefits, sickness, \$5 per week; death, \$100. President, W. Kennedy; Corresponding Secretary, J. F. Reason, Ottawa West; meets 2nd and 4th Wednesdays in month.

Name,—International Pressfeeders' and Assistants' Union, No. 9. Organized May 15, 1909; total membership, 73; average earnings per week, \$7, \$9, \$10, \$11.25; average earnings per hour, 14½c., 18¾c., 21c., 23½c.; number of working hours first five days, 43; number on Saturday, 5; wages paid weekly and fortnightly; death, benefits, \$100. President, John Rooney, Stewart St., Ottawa; Corresponding Secretary, O. Bureau, 87 Ann St., Hull, Que.; meets 2nd Monday in month.

Name,—International Printing Pressman's Union, No. 5. Organized January, 1879; total membership, 49; average earnings per week, \$18.50; average earnings per hour, 38½c.; number of working hours first five days, 42½; number on Saturday, 5; wages paid weekly and fortnightly; no idle time; total number (union and non-union) employed at trade in locality, 49; cash benefits, death, \$100. President, Warren E. Bell, 2 Salisbury Place, Ottawa; Corresponding Secretary, Alfred J. Larden, 327 Bell St., Ottawa; meets 3rd Friday in each month.

Name,—Commercial Union, No. 1 (Salesmen). Organized Oct. 10, 1890; total membership, 75; average earnings per week, \$10; number of working hours first five days, 45; number on Saturday, 11; wages paid weekly; special work for members, social gatherings; body registered. President, W. A. Brown, Henderson

Ave.; Corresponding Secretary, H. Leduc, 277 Clarence St.; meets 1st and 2nd Mondays in month.

Name,—Sheet Metal Workers' International Alliance, No. 47. Organized Sept., 1907; total membership, 75; average earnings per week, \$17.15; average earnings per hour, 35c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly and fortnightly; average number of days idle per member, 30; general cause of idleness, scarcity of work in winter; total number (union and non-union) employed at trade in locality, 85; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, about 10c. an hour, and one hour a day more work; cash benefits, death, \$100; body incorporated and registered. President, J. J. Murphy, 475 Cooper St.; Corresponding Secretary, J. M. Bond, 123 Spruce St.; meets 2nd and 4th Thursday in month.

Name,—International Alliance of Theatrical Stage Employees, Local, 95. Organized March, 1902; total membership, 48; average earnings per week, \$15 to \$20; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 10; wages paid weekly; number of days idle per member during year, 60; general cause of idleness, close theatres; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, members receive \$15 to \$20: non-members \$8 to \$10 per week. President, Romeo R. Marcil, 191 St. Andrew St., Ottawa; Corresponding Secretary, Donald Casey, 52 Gloucester St., Ottawa; meets 1st Sunday in month.

Name,—Stereotypers' and Electrotypers' International Union, No. 50. Organized October 2, 1900; total membership, 10; average earnings per week, \$17.50; average earnings per hour, 36½c.; number of working hours first five days, 43; number on Saturday, 5; wages paid fortnightly; no idle days; total number (union and non-union) employed at trade in locality, 10; all are union in locality; cash benefits, death, \$100. President, Thomas Miller, Herridge St.; Corresponding Secretary, W. R. Hague, 139 Henderson Ave., Ottawa.

Name,—Stonecutters' International Association. Organized December 5, 1853; total membership, 60; average earnings per week, \$19.36; average earnings per hour, 44c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 150; general cause of idleness, no work during winter months; total number (union and non-union) employed at trade in locality, 150; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 5c. to 15c. per hour less for non-members; cash benefits, death, \$100; body incorporated and registered. President, Walter Turner, 116 Florence St.; Corresponding Secretary, J. W. Thomson, 274 Turner St.; meets 2nd and 4th Fridays in month.

Name,—Amalgamated Association of Street and Electric Railway Employees of America, No. 279. Organized May 11, 1906; total membership, 245; average earnings per week, \$15; average earnings per hour, 22c.; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; total number (union and non-union) employed at calling in locality, 330; no difference in wages or hours between members and non-members; cash benefits, death, \$100; body incorporated and registered. President, J. O'Brien, 211 Slater St.; Corresponding Secretary, J. O'Brien, 211 Slater St.; meets 1st and 3rd Fridays in month.

Name,—Journeymen Tailors' Union of America, No. 143. Organized 1883; total membership, 36 male, and 15 female; average earnings per week, \$12.50 for

male, \$6 for female; average earnings per hour, male 24c., female 15c.; wages paid weekly; average number of days idle per member during year, 60; general cause of idleness, slackness of work; total number (union and non-union) employed at trade in locality, males, 300; females, 200, including Hull; difference in wages and hours of labour of those employed in trade in locality, between members and non-members of organization, about 5c. per hour less; cash benefits, sick, \$5 per week; death, \$100; body incorporated. President, F. D. Walters, 170 Nepean St.; Corresponding Secretary, Charles Milne, 510 $\frac{1}{4}$ Kent St.; meets 1st and 3rd Mondays in month.

Name,—Brotherhood Railroad Trainmen (Jubilee Lodge), No. 129. Organized September, 1887; total membership, 177; wages paid monthly. President, A. E. Salmon, 48 Preston St., Ottawa; Corresponding Secretary, Wm. A. Perry, 1 Elm St., Ottawa.

Name,—Brotherhood of Railroad Trainmen, No. 185; total membership, 134; average earnings per week, paid on mileage basis; average earnings per hour, conductors, \$3.36; brakemen, \$2.23 per 100 miles; 10 hours or 100 miles constitute one day; wages paid monthly; average number of days idle per member during year, uncertain; general cause of idleness, depression in traffic; total number (union and non-union) employed at calling in locality, 150; no difference in wages or hours between members and non-members; cash benefits, death, \$500, \$1,000, and \$1,350; body incorporated and registered. President, John Maloney, 62 Henderson Ave.; Corresponding Secretary, H. H. Brown, 512 Lyon St.; meets alternate Sundays in month.

Name,—Canadian Typographical Union, No. 1. Organized October 6, 1906; total membership, 115; average earnings per week, \$19.50; average earnings per hour, 40c.; number of working hours first five days, 41 $\frac{1}{2}$; number on Saturday, 5; wages paid fortnightly; cash benefits, sickness, \$4 per week; death, \$200. President, W. C. Feague; Corresponding Secretary, J. H. Lanthier, 649 Cumberland St.; meets 2nd Saturday of the month.

OWEN SOUND.

Name,—Bricklayers' and Masons' International Union, No. 11. Organized May 15, 1889; average earnings per week, \$22; average earnings per hour, 45c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, cold weather; total number (union and non-union) employed at trade in locality, 30; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, members receive 10c. per hour more than non-members; cash benefits, death, \$200. President, Chas. Leathbridge, 5th Avenue, West; Corresponding Secretary, Samuel Mather, East Hill; meets every Thursday in month.

Name,—International Moulders' Union No. 413; total membership, 20; average earnings per week, \$15; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, slackness in trade; total number (union and non-union) employed at trade in locality, 40; difference in wages and hours of those engaged at trade in locality, between members and non-members of organization, union men, \$2.75 per day; non-union, \$2.50 per day; cash benefits, sickness, \$5.40 per week; out of work benefits, \$7.20 per week; body incorporated. President, William Farmer; Corresponding Secretary, W. O. Cornwith, 1673 4th Avenue, West; meets 1st and 3rd Tuesdays in month.

Name,—Journeyman Stonecutters of North America. Organized January, 1902; total membership, 5; average earnings per hour, 45c.; number of working hours, first five days, 40; number on Saturday, 8; wages paid weekly; total number (union and non-union) employed at trade in locality, 5; cash benefits, death, \$100. President, David Fraser, 357 5th Street; Corresponding Secretary, Edward Gaskell, 1132 4th Avenue, East; meets 1st and 3rd Fridays in month.

PALMERSTON.

Name,—Brotherhood of Locomotive Firemen and Enginemen (Wellington Lodge), No. 181. Organized 1883; total membership, 36; average earnings per week, \$15; number of working hours first five days, paid mileage system; number on Saturday, from 5 to 24; wages paid monthly; general cause of idleness, depression of traffic; total number (union and non-union) employed at calling in locality, 50; no difference in wages or hours between members and non-members; cash benefits, death and disability, \$500 to \$3,000; body incorporated and registered. President, D. G. Freeland, Palmerston, Ont.; Corresponding Secretary, H. W. Ladd, Box O, 10, Palmerston, Ont.; meets 1st and 3rd Sundays in month.

PARRY SOUND.

Name,—International Association of Machinists. No. 518. Organized 1907; total membership, 12; average earnings per week, \$16; average earnings per hour, 30c.; number of working hours first five days, 50; number on Saturday, 9; wages paid monthly; average number of days idle per member during year, 15; total number (union and non-union) employed at trade in locality, 17; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 3c. to 4c. per hour; body incorporated. President, Joseph Smith, Parry Sound; Corresponding Secretary, George Heart, Parry Sound; meets 1st and 3rd Wednesdays in month.

Name,—International Brotherhood of Maintenance of Way Employees, No. 447. Organized March, 1909; total membership, 60; average earnings per week, \$11.40; average earnings per hour, 19c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 70; body incorporated and registered. President, John Carlton, Parry Harbour, Ont.; Corresponding Secretary, C. Smith, Otter Lake Station, Ont.; no regular meeting night.

Name,—Brotherhood of Railroad Trainmen, No. 759. Organized June, 1908; total membership, 45; average earnings per week, \$20; number of working hours first five days, irregular; number on Saturday, irregular; wages paid monthly; average number of days idle per member during year, varies according to traffic; general cause of idleness, depression in traffic; cash benefits, death, \$500 to \$1,350; body incorporated and registered. President, W. Burke, Box 535, Parry Sound; Corresponding Secretary, S. G. Wilkinson, Box 535, Parry Sound; meets 2nd and 4th Sundays in month.

PENETANGUISHENE.

Name,—Canadian Association of Masters and Mates, Branch No. 4. Organized December, 1906; total membership, 13; average earnings, \$800 per annum; average number of working hours first five days, have no set hours; number on Sat-

urday all day; wages paid monthly; average number of days idle per member during year, about five months; general cause of idleness, waters frozen up; total number (union and non-union) employed at calling in locality, 26; no difference in wages or hours between members and non-members; body registered. President, Roy Burke, Penetanguishene; Corresponding Secretary, W. J. Martin, Penetanguishene; meets Saturday nights in winter months; 1st Saturday in month in summer.

PETERBOROUGH.

Name,—Journeyman Barbers' International Union of America, No. 402. Organized 1902; total membership, 31; average earnings per week, \$13; wages paid weekly; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, \$3 to \$4 per week; cash benefits, sickness, \$5 per week; death, \$75 to \$500. President, Edward Kelly, Charlotte St.; Corresponding Secretary, George Brousseau, 140 Brock St.; meets 3rd Monday in month.

Name,—United Brewery Workmen, No. 301. Organized March 6, 1910; total membership, 15; average earnings per week, \$14, \$13, \$12.50; the rest \$11 and \$10; number of working hours first five days, 47½; number on Saturday, 8; wages paid weekly; total number (union and non-union) employed at calling in locality, 17; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, \$1 less for non-members; body incorporated and registered. President, Robert Zingard, Peterborough, Ont.; Corresponding Secretary, J. C. Godfrey, 10 Hunter St.; meets 1st Thursday in month.

Name,—Bricklayers' and Masons' International Union, No. 17. Organized November, 1901; total membership, 42; average earnings per week, \$19.20; average earnings per hour, 40c.; number of working hours first five days, 40; number on Saturday, 8; wages paid fortnightly; average number of days idle per member during year, 100; general cause of idleness, lack of material and bad weather; total number (union and non-union) employed at trade in locality, 42; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union men work 9 hours per day; cash benefits, death, \$150 to \$200. President, M. H. Dicks, Patterson St.; Corresponding Secretary, William Stevens, Box 778; meets 1st and 3rd Tuesdays in month.

Name,—International Brotherhood of Maintenance of Way Employees, No. 211; total membership, 52; average earnings per week, \$10.46; average earnings per hour, 15½c; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization, 10c. per day less to non-union labour; hours the same; body incorporated and registered. President, George Spicer, Peterborough; Corresponding Secretary, George A. Tummon, Leaside Junction; meets at call of President.

Name,—International Moulders' Union, No. 191. Organized 1874; total membership, 84; average earnings per week, \$16; average earnings per hour, 27½c.; number of working hours first five days, 50; number on Saturday, 9 in winter; 5 in summer; wages paid weekly and fortnightly; average number of idle days per member during year, 25 to 30; general cause of idleness, depression in trade and holidays; total number (union and non-union) employed at trade in locality, 84; cash benefits, sickness, \$5 per week; death, \$100, \$150, \$175, \$200; out of work benefits, dues remitted. President, Hugh Robertson, 567 Reid St.; Corresponding Secretary, William A. Mowry, 457 Cedar St.; meets 1st and 3rd Thursdays in month.

Name,—Brotherhood of Painters, Decorators and Paperhangers of America. Organized June 2, 1909; total membership, 16; average earnings per week, \$13.50; average earnings per hour, 25c.; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly; average number of days idle per member during year, 30; general cause of idleness, slackness of work and a late spring; total number (union and non-union) employed at trade in locality, 25; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-members work from 15c. upwards; cash benefits, death, \$50; body registered. President, Thos. Embury, 344 Simcoe St.; Corresponding Secretary, Thos. E. Hall, corner Woodbine and Erskine Ave.; meets 1st and 3rd Mondays in month.

Name,—Pattern Makers' League of North America. Organized October 17, 1900; total membership, 35; average earnings per week, \$17.85; average earnings per hour, 32½c.; number of working hours first five days, 50; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 12; general cause of idleness, holidays or sickness; total number (union and non-union) employed at trade in locality, 35; cash benefits, sickness, \$4 per week; death, \$50 to \$100; superannuation, \$12 to \$16 per month. President, C. F. Brown, 30 College St.; Corresponding Secretary, J. A. Sharp, 537 Homewood Ave.; meets 2nd and 4th Tuesdays in month.

Name,—International Typographical Union, No. 248. Organized February, 1902; total membership, 40; average earnings per week, \$14; average earnings per hour, 29c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; total number (union and non-union) employed at trade in locality, 40; cash benefits, death, \$75; superannuation, \$4 per week; body registered. President, E. Bartlett, 216 London St., Peterborough; Corresponding Secretary, J. M. Galbraith, 125 Brock St., Peterborough; meets 1st Saturday in month.

PORCUPINE.

Name,—Western Federation of Miners, No. 145. Organized April 23, 1910; total membership, 500; average earnings per week, \$17.50; average earnings per hour, 25c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 175; total number (union and non-union) employed at trade in locality, 1,600; library for use of members. President, Hugh Kincaide, Drawer H, Porcupine; Corresponding Secretary, James D. Cluney, Drawer H, Porcupine; meets Sunday.

PRESCOTT.

Name,—International Longshoremen's Association, No. 244. Organized May 27, 1901; total membership, 25; average earnings per week, \$13; average earnings per hour, day, 35c.; night, 40c.; Sunday, 50c.; number of working hours first five days, from 6½ to 7½; number on Saturday, 6½, and on some boats 7½; wages paid weekly; average number of days idle per member during year, summer, 12; winter, 130; general cause of idleness, in summer, thunderstorms; in winter, navigation closed; reading-room for benefit of members in winter months; body incorporated and registered. President, Edward Anderson, Prescott, Ont.; Corresponding Secretary, William J. Himes, Jr., Water St., Prescott, Ont.; meets every Monday night.

PRESTON.

Name,—International Moulders' Union, No. 314. Organized May 5, 1900; total membership, 80; average earnings per week, \$18; average earnings per hour, 27½c.; number of working hours first five days, 50; number on Saturday, 9; wages paid weekly; average number of days idle per member during year, 50; general cause of idleness, trade conditions; total number (union and non-union) employed at trade in locality, 120; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, about \$1 per day; cash benefits, sickness, \$5.40 per week; death, \$100 to \$200; out of work benefits, exemption from dues. President, Chas. Kremer, Preston; Corresponding Secretary, Thos. J. Parker, Box 85, Preston; meets 1st and 3rd Tuesday in month.

PORT ARTHUR.

Name,—Amalgamated Society of Carpenters and Joiners. Organized August, 1910; total membership, 41; average earnings per hour, 40c.; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; average number of days idle per member during year, 50; general cause of idleness, severe weather; total number (union and non-union) employed at trade in locality, 60; no difference in wages or hours between members and non-members; cash benefits, lack of employment, \$2.50 per week; sickness, \$3 per week; death, \$60; superannuation, \$2 per week; out of work benefits, \$18 in one year; body incorporated and registered. President, A. Fraser, St. Vincent Street; Corresponding Secretary, S. Bell, 176 Banning Street; meets 1st and 3rd Monday in month.

Name,—United Brotherhood of Carpenters and Joiners, No. 285. Organized March, 1906; total membership, 52; average earnings per week, \$21; average earnings per hour, 40c.; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; average time idle per member during year, 10 weeks; general cause of idleness, scarcity of work in winter months; total number (union and non-union) employed at trade in locality, 200; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 5c. to 10c. per hour; cash benefits, death, \$100 to \$200. President, W. J. Robertson, 392 John Street; Corresponding Secretary, A. F. Manchee, 116 Jean Street; meets 1st and 3rd Mondays in month.

Name,—International Association of Machinists, No. 820. Organized April, 1908; total membership, 15; average earnings per week, \$18; average earnings per hour, 30c.; number of working hours first five days, 45 and 50; number on Saturday, 9 and 10 in winter; 5 and 10 in summer; wages paid weekly and monthly; no idle days; total number (union and non-union) employed at trade in locality, 25; no difference in wages or hours between members and non-members; cash benefits, death, \$50 to \$200; superannuation, \$500 to \$1,000; out of work benefits, exemption from dues. President, Ernest Sellers, 244 Cameron Street; Corresponding Secretary, Andrew Boyd, 368 Wiley Street; meets 1st Wednesday in month.

Name,—United Association of Plumbers and Steamfitters, No. 378. Organized June 4, 1907; re-organized July 19, 1910; total membership, 16; average earnings per week, \$20; average earnings per hour, 37 2-3c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly and monthly; average number of days idle per member during year, 10; general cause of idleness, slackness in trade; total number (union and non-union) employed at trade in locality, 20;

cash benefits, sickness, \$5 per week; death, \$100; out of work benefits, dues remitted. President, L. McArthur, Prospect Avenue; Corresponding Secretary, C. J. Vincent, 36 Algoma Street South; meets 2nd and 4th Fridays in month.

Name,—International Alliance of Amalgamated Sheet Metal Workers, No. 285. Organized July, 1910; total membership, 34; average earnings per week, \$20; average earnings per hour, 37½c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly and fortnightly; no idle days; cash benefits, death, \$100; body incorporated and registered. President, S. A. Wallace, 1015 Myles Street, Fort William; Corresponding Secretary, John E. Murphy, 43 Regent Street, Port Arthur; meets 4th Tuesday in month.

Name,—Journeyman Stonecutters of North America. Organized December 5, 1853; total membership, 15; average earnings per hour, 60c.; number working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, five and six months; general cause of idleness, winter weather and slackness of trade; total number (union and non-union) employed at trade in locality, 15; all are union in this locality; cash benefits; death, \$100; body is incorporated and registered. President, Mike King, Carrick Add; Corresponding Secretary, Robt. Paton, Empire Avenue, Carrick Add; meets 2nd and 4th Tuesday in month.

PORT HOPE.

Name,—International Moulders' Union, No. 189. Total membership, 55; average earnings per week, \$20; average earnings per hour, 35c.; number of working hours first five days, 47½; number on Saturday, 9½; wages paid fortnightly; average number of days idle per member during year, 30; general cause of idleness, stocktaking and break downs; all are members of organization; cash benefits; sickness, \$5 per week; death, \$100 to \$200; out of work benefits, dues remitted; body incorporated. President, Walter Thomas, Box 341, Port Hope; Corresponding Secretary, Chas. McElroy, Box 201, Port Hope; meets 1st and 3rd Mondays in month.

RAINY RIVER.

Name,—Order of Railway Conductors, No. 30. Organized March 1, 1910; total membership, 31; average earnings per week, \$25; average earnings per hour, 42c.; number of working hours first five days, 48; number on Saturday, 9; wages paid monthly; no idle days; total number (union and non-union) employed at trade in locality, 65; no difference in wages or hours between members and non-members; body incorporated and registered. President, A. B. Garretson, Cedar Rapids; Corresponding Secretary, S. McElroy, Box 129, Rainy River; meets 1st and 3rd Sundays in month.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 750. Organized July, 1909; total membership, 47; paid on mileage basis; wages paid monthly; total number (union and non-union) employed at trade in locality, 50; no difference in wages or hours of labour between members and non-members; death benefit, amount of beneficiary carried. President, A. L. Campbell, Rainy River; Corresponding Secretary, A. E. Smith, Box 61, Rainy River; meets 2nd and 4th Thursdays in month.

RICHMOND HILL.

Name,—Order of Railroad Telegraphers. Total membership, 15; average earnings per week, \$14.47; average earnings per hour, 17c.; number of working hours

first five days, 60; number on Saturday, 12; wages paid monthly; average number of days idle per member during year, one week; general cause of idleness, personal request; total number (union and non-union) employed at trade in locality, 22; no difference in wages or hours between members and non-members; cash benefits, death, \$300 to \$1,000. President, H. B. Perham, Order Railroad Telegraphers, St. Louis, Mo.; Corresponding Secretary, John Lucas, Richmond Hill; meets at call of chair.

RIDGEMONT.

Name,—Order of Railway Telegraphers, No. 16 Div. Organized December 24, 1894; total membership, male, 399; female, 3; average earnings per week, male, \$17.50; female, \$17.50; average earnings per hour, male, 20c.; female, 20c.; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; average number of days idle per member during year, 15; general cause of idleness, taking holidays to recruit; total number (union and non-union) employed at calling in locality, 14; no difference in wages and hours of labour of those engaged at calling in locality, between members and non-members of organization; death benefits according to insurance. President, J. C. Culkins; Albion, Mich.; Corresponding Secretary, J. H. Staley, Ridgmont, Ont.; meets every 3rd Monday in month.

ST. CATHARINES.

Name,—Barbers' Union, No. 1. Organized October 1, 1886; total membership, 25; average earnings per week, \$13; number of working hours first five days, 60; number on Saturday, 15; wages paid weekly; total number (union and non-union) employed at trade in locality, 29; cash benefits, sickness, \$3 per week; death, \$25. President, James M. Bessey, St. Paul Street; Corresponding Secretary, Adam Haynes, 293 St. Paul Street; meets 1st and 3rd Mondays in month.

Name,—International Brewery Workers of America, No. 305. Organized January, 1910; total membership, 18; average earnings per week, \$9.50; average earnings per hour, 15c.; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly; total number (union and non-union) employed at calling in locality, 18; body incorporated. President, George Wiley, 5 Cherry Street; Corresponding Secretary, Robert Hall, 4 Thomas Street; meets 3rd Friday in month.

Name,—Bricklayers', Masons' and Plasterers' International Union, No. 4. Organized April 1, 1882; total membership, 55; average earnings per week, \$16; average earnings per hour, 48c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 100; general cause of idleness, inclement weather; total number (union and non-union) employed at trade in locality, 55; cash benefits, death, \$100 to \$200; recreation room during winter for members. President, R. N. Rymer, 15 Dacotah Street; Corresponding Secretary, C. G. Patey, 48 Louisa Street; meets 1st and 3rd Tuesday in month.

Name,—Amalgamated Society of Carpenters and Joiners. Organized June 4, 1864; total membership, 6; average earnings per week, \$15; average earnings per hour, 35c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 20; general cause of idleness, winter weather; total number (union and non-union) employed at trade in locality, 130; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 8c. in favour of members; cash benefits, lack of employment, \$2.50 per week; sickness, \$3

per week; death, \$60.; superannuation, \$2.50 per week; out of work benefits, \$2.50 per week; body registered in Great Britain. President, Horace Atkinson, 5 Geneva Street; Corresponding Secretary, James Atkinson, 5 Geneva Street; meets alternate Thursdays.

Name,—United Brotherhood of Carpenters and Joiners of America, No. 38. Organized February, 1883; total membership, 85; average earnings per week, \$17.50; average earnings per hour, 35c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly and fortnightly; average number of days idle per member during year, 20; general cause of idleness, inclement weather; total number (union and non-union) employed at trade in locality, 95; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union rate, 35c.; non-union, 30c.; some even less; cash benefits, death, \$200; disability, \$400. President, R. H. Bradley, 138 Queenston Street; Corresponding Secretary, James Carty, 19 Cherry Street; meets every Friday in month.

Name,—International Cigarmakers' Union, No. 140. Organized August 24, 1881; total membership, male, 24; female, 1; average earnings per week, male, \$12; female, \$12; average earnings per hour, male, 25c.; female, 25c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, male, 26; female, 1; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, \$4 to \$5, and in hours, 12 per week; cash benefits, sickness, \$5 per week; death, \$50 to \$550; out of work benefits, \$3 per week; death of wife or mother, \$50; body incorporated and registered. President, Wilfred Haynes, 131½ Cherry Street; Corresponding Secretary, Leo. T. Coyle, 3 Court Street; meets 1st Saturday in month.

Name,—Metal Polishers, Buffers, Platers and Silver Workers of North America, No. 97. Organized 1902; total membership, 19; average earnings per week, \$15; average earnings per hour, 25c.; number of working hours first five days, 9½; number on Saturday, seven months, 9; five months, 5; wages paid weekly and fortnightly; general cause of idleness, stocktaking and holidays; total number (union and non-union) employed at trade in locality, 27; no difference in wages or hours between members and non-members; death benefits, six months, \$50; one year, \$100. President, W. Bowen, 184 Lake Avenue; Corresponding Secretary, W. H. Secord, 51 Henry Street; meets 1st and 3rd Fridays in month.

Name,—Painters, Decorators and Paperhangers of America, No. 407. Organized August, 1901; total membership, 31; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 35 to 90; general cause of idleness, slackness in trade; total number (union and non-union) employed at trade in locality, 35 to 40; cash benefits, death, \$100 to \$300, according to length of membership. President, Fred. Wiley, 5 Fitzgerald Street; Corresponding Secretary, W. D. Outram, 30 Nelson Street; meets 2nd and 4th Wednesdays.

Name,—United Association of Plumbers, Steam and Gas Fitters, No. 244. Organized April, 1901; total membership, 22; average earnings per week, \$13.20; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; total number (union and non-union) employed at trade in locality, 25; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 5c.

per hour less; hours the same; cash benefits, sickness, \$5 per week; death, \$100; out of work benefits, dues remitted. President, Richard English, 119 Geneva St.; Corresponding Secretary, H. Oliver, 31 Beech Street; meets every Thursday in month.

Name,—Journeyman Tailors Union of America, No. 235. Organized 1896; total membership, male, 18; female, 12; average earnings per week, male, \$13.50; female, \$6; average earnings per hour, male, 25c.; female, 15c.; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; average number of days idle per member during year, 50; general cause of idleness, slack season; total number (union and non-union) employed at trade in locality, male, 26; female, 14; union men have slightly higher wages than non-union; cash benefits, sickness, \$5 per week; death, \$100 for 4 years' membership. President, J. A. Tufford, corner Church and William Streets; Corresponding Secretary, Vernon Fullerton, 90½ King Street; meets 1st Monday in month.

ST. MARY'S.

Name,—Journeyman Stonecutters of North America. Organized 1905; total membership, 6; average earnings per week, \$21.60; average earnings per hour, 45c.; number of working hours first five days, 40; number on Saturday, 8; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, winter weather; all are members of union in locality; death benefits, \$100; no special work for members. President, Alex. Craig, St. Mary's, Ont.; Corresponding Secretary, W. H. McCauley, St. Mary's, Ont.; meets 1st and 3rd Tuesdays in month.

ST. THOMAS.

Name,—Brotherhood of Boilermakers of America, No. 413. Total membership, 53; average earnings, \$15; average earnings per hour, 28c. and 31½c.; number of working hours first five days, 45 and 50; number on Saturday, 5 and 10; wages paid monthly; average number of days idle per member during year, 6; general cause of idleness, holidays; total number (union and non-union) employed at trade in locality, 70; no difference in wages or hours between members and non-members, death benefits, \$50 to \$100. President, Daniel J. Dailey, 75 Forest Avenue; Corresponding Secretary, W. McGillivray, 20 Hemlock Street; meets 2nd and 4th Tuesdays in month.

Name,—Bricklayers', Masons' and Plasterers' Union, No. 8. Total membership, 22; average earnings per week, \$21.60; average earnings per hour, 40c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, two months; general cause of idleness, cold weather; total number (union and non-union) employed at trade in locality, 25; difference in wages between members and non-members, 5c. per hour; death benefits, \$200; body registered. President, A. E. Goddard, East Street; Corresponding Secretary, Orlando J. Beal, 83 Erie Street; meets 2nd and 4th Wednesday in month.

Name,—Cigarmakers' International Union, No. 420. Organized 1896; total membership, 9; average earnings per week, \$12; average earnings per hour, 30c.; number of working hours first five days, 40; number on Saturday, 4 to 6; wages paid weekly; average number of days idle per member during year, 14; general cause of idleness, stocktaking; cash benefits, sickness, \$5 per week; death, \$50 to

\$550; out of work benefits, \$3 per week. President, Geo. Haslam, Curtis Street; Corresponding Secretary, Jack Pearse, 20 Regent Street; meets 1st and 3rd Fridays in month.

Name,—Order of Railway Conductors, No. 13. Organized October 1, 1880; total membership, 96; average earnings per week, \$30; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 125; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5 and \$10 per week; death benefits, amount of insurance; body registered. President, E. Shoemaker, 47 Manitoba Street; Corresponding Secretary, K. Hastings, 48 Southwark Street; meets 2nd and 4th Sundays in month.

Name,—Brotherhood of Locomotive Engineers, Air Line Sub-Division No. 529. Total membership, 55; average earnings per week, \$28; wages paid monthly; average number of days idle per member during year, 30; general cause of idleness, repairs; all are members of organization; no special work for members; body incorporated and registered. President, W. S. Stone, Brotherhood of Locomotive Engineers Building, Cleveland, Ohio; Corresponding Secretary, Arthur H. Martin, 52 Manitoba Street, St. Thomas, Ontario; meets Tuesday afternoons.

Name,—International Association of Machinists, No. 294. Reorganized July 18, 1907; total membership, 150; average earnings per week \$15; average earnings per hour, 34½c.; number of working hours first five days, 45; number on Saturday, 5; wages paid monthly; average number of days idle per member during year, 40; general cause of idleness, retrenchment plan of company; total number (union and non-union) employed at trade in locality, 160; difference in wages between members and non-members, 10c. per hour; death benefits, \$500; strike pay \$8 per week; special work for members; body incorporated and registered. President, Thos. Stone, 17 East Street; Corresponding Secretary, J. J. J. Stewart, 56 Redan Street, St. Thomas; meets 1st and 3rd Tuesdays in month.

Name,—Painters, Decorators and Paperhangers of America, No. 701. Organized February 28, 1911; total membership, 21; average earnings per week, \$13.50; average earnings per hour, 22½c.; number of working hours first five days, 50; number on Saturday, 9 (paid for 10); wages paid weekly; average number of days idle per member during year, 50; general cause of idleness, lack of work; total number (union and non-union) employed at trade in locality, 40; no difference in wages or hours between members and non-members; body incorporated and registered. President, G. C. Follick, 27 Elysian Street; Corresponding Secretary, E. M. Trump, 319 Talbot Street; meets 2nd and 4th Tuesdays in month.

Name,—International Printing and Pressmen Union, No. 129. Organized October, 1908; total membership, 8; average earnings per week, \$13; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; no idle days; all are members of organization in locality; death benefits, pressmen, \$100; assistants, \$75. President, H. Colledge, Manitoba Street; Corresponding Secretary, S. Pearse, Regent Street; meets 2nd Monday in month.

Name,—International Association of Steamfitters and Helpers, No. 7. Organized April, 1910; total membership, 12; average earnings per week, \$15; average earnings per hour, 25c.; number of working hours first five days, 45; number on Saturday, 5; wages paid monthly; average number of days idle per member during year, 25; total number (union and non-union) employed at trade in locality, 17; death benefit, \$50; body incorporated and registered. President, Chas. M. Doritty, 8 Maple Street; Corresponding Secretary, F. O. Osborne, 27 Redan Street; meets 1st and 3rd Thursdays in month.

Name,—Journeyman Stonecutters' Association of America. Organized 1853; total membership, 7; average earnings per week, \$19.80; average earnings per hour, 45c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 90; general cause of idleness, lack of work and cold weather; total number (union and non-union) employed at trade in locality, 7; no difference in wages or hours between members and non-members; death benefits, \$100; body registered. President, Jabez Mason, 754 Maitland Street, London; Corresponding Secretary, Hugh Boyd, 875 Adelaide Street, London; meets 1st and 3rd Fridays in month.

Name,—Journeyman Tailors' Union of America, No. 141. Organized 1890; total membership, male, 15; female, 20; average earnings per week, male, \$12½; female, \$6.50; number of working hours first five days, 50 to 60; number on Saturday, 10 to 12; average number of days idle per member during year, 40; general cause of idleness, slackness of trade; total number (union and non-union) employed at trade in locality, male, 20; female, 30; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, members receive from \$2 to \$5 a week more than non-members; cash benefits, sickness, \$5 per week; death, \$25 to \$100. President, Isaac H. Austin, Hamilton Street; Corresponding Secretary, W. Abernethy, 32 Ross Street; meets 4th Monday in month.

Name,—Order Railway Telegraphers, No. 39. Organized 1904; total membership, 45; average earnings per week, \$14; average earnings per hour, 19½c.; number of working hours, 65; number on Saturday, 13; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 48; no difference in wages or hours between members and non-members; death benefits, insurance, \$300, \$500, \$1,000; body incorporated. President, H. B. Perham, St. Louis, Mo.; Corresponding Secretary, F. D. Keeler, 1000 Wealthy Avenue, Grand Rapids, Mich.; meets subject to call of Chairman.

Name,—Brotherhood of Railway Trainmen, No. 47. Organized April 21, 1887; total membership, 360; average earnings per week, paid on mileage basis; average earnings per hour, day conductors, 37c.; night conductors, 39c.; day brakemen, 34c.; night brakemen, 36c.; wages paid monthly: average number of days idle per member during year, uncertain; general cause of idleness, depression in business; total number (union and non-union) employed at calling in locality, 100; no difference in wages or hours between members and non-members; death benefits, \$500 to \$1,350; body registered. President, A. E. Hookway, 638 Talbot Street, St. Thomas; Corresponding Secretary, Herbert Sharp, 2 John Street; meets every Monday.

Name,—International Typographical Union, No. 459. Organized April 1, 1908; total membership, 25; average earnings per week, \$14; average earnings per hour, 30c.; number of working hours, 48 per week; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, male, 60; female, 14; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, from \$2 to \$6 per week, and 2 to 4 hours per day; cash benefits, sickness, \$5 per week; death, \$75; body registered. President, Lorne Calcott, c/o Journal Printing Co.; Corresponding Secretary, Robt. Porter, 8 Drake Street; meets 2nd Monday in month.

SARNIA.

Name,—Brotherhood of Railway Carmen, No. 295. Organized June 3, 1907; total membership, 5; average earnings per week, \$10; average earnings per hour, 18c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, 10; general cause of idleness, holidays; total number (union and non-union) employed at trade in locality, 21; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 16c. to 21c. less; cash benefits, sickness, \$3 per week; death, \$250 to \$2,000; superannuation, pension at 65. President, W. Dagg, 434 Russell Street, Sarnia; Corresponding Secretary, W. F. Gibson, 301 Russell Street, Sarnia; meets 1st Monday in month.

Name,—Order of Railway Conductors, No. 187. Organized April 27, 1886; total membership, 50; average earnings per week, \$25; no regular hours, called when required; wages paid monthly; general cause of idleness, two weeks in July on account of strike; wages increased 18 per cent. from May 1, 1910; total number (union and non-union) employed at calling in locality, 55; no difference in wages or hours between members and non-members; death benefits, \$1,000 to \$3,000; superannuation; pension by G. T. R.; body incorporated and registered. President, John W. Weston, 127 Vidal Street, Sarnia; Corresponding Secretary, H. Bell, 288 Campbell Street; meets 1st and 3rd Tuesdays in month.

Name,—Brotherhood of Locomotive Engineers, No. 240. Organized January 18, 1884; total membership, 84; working hours, 12 per day; wages paid monthly; total number (union and non-union) employed at calling in locality, 110; no difference in wages or hours between members and non-members; death benefits, \$750 to \$4,500; body incorporated and registered. President, Jas. S. Crawford, 111 North Brock Street; Corresponding Secretary, Jas. Copeland, 140 Savoy Street, Sarnia; meets alternate Thursdays in month.

Name,—International Longshoremen's Association, No. 253. Organized July 22, 1910; total membership, 18; average earnings per week, \$10.50; average earnings per hour, 30c.; number working hours first five days, 50; number on Saturday, 10; average number of days idle per member during year, 104; general cause of idleness, winter weather; total number (union and non-union) employed at trade in locality, 30; no difference in wages or hours between members and non-members; body incorporated and registered. President, Edwin Owen, 117 Julia Street; Corresponding Secretary, John Jackson, Sarnia; meets 1st and 3rd Fridays in month.

Name,—Brotherhood of Railway Trainmen, No. 227. Organized July 5, 1886; total membership, 127; average earnings per week, \$20; wages paid monthly; general cause of idleness, slackness of freight; total number (union and non-union) employed at trade in locality, 500; no difference in wages or hours between members and non-members; death benefits, \$1,500; body registered. President, James McKeever, St. Clair Hotel, Sarnia; Corresponding Secretary, D. McEachan, 125 Margaret Street; meets 1st and 3rd Mondays at 8 p.m., and 2nd and 4th Mondays at 2 p.m.

SAULT STE. MARIE.

Name,—Brotherhood of Locomotive Engineers, No. 67. Organized 1902; total membership, 15; average earnings per week, \$26; average earnings per hour, 36c.; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; no idle days; total number (union and non-union) employed at calling in

locality, 15; no difference in wages or hours between members and non-members; cash benefits, sickness, \$1 per day; death, \$500; body incorporated and registered. President, W. Cleminson, Steelton; Corresponding Secretary, A. C. Wagner, Box 27, Soo West P.O.

Name,—International Brotherhood of Maintenance of Ways Employees, No. 7. Organized Nov. 5, 1886; total membership, 30; average earnings per week, men, \$10.25; foremen, \$17; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of idle days per member during year, Christmas and New Year's Day; general cause of idleness, holidays; total number (union and non-union) employed at trade in locality, 35; no difference in wages or hours between members and non-members; body incorporated. President, W. S. Smith, Walford P.O.; Corresponding Secretary, W. McCarthy, Webbwood, Ont.

Name,—Iron Moulders' Union of North America, No. 391. Organized September 23rd, 1906; total membership, 24; average earnings per week, \$18 to \$18.90; average earnings per hour, 30c. to 31½c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; average number of days idle per member during year, no record; general cause of idleness, sickness, or voluntary; total number (union and non-union) employed at trade in locality, 36; no difference in wages or hours between members and non-members; sick benefits, \$5.40 per week; out of work benefits, dues remitted; no special work for members. President, James Darrance, 45 Grosvenor Ave., Sault Ste. Marie; Corresponding Secretary, E. C. Wood, Moffy Sub. Div., Sault Ste. Marie; meets 3rd Friday.

Name,—Journeymen Plumbers' Union, No. 414. Organized June 25, 1910; total membership, 12; average earnings per week, \$21 or \$22.50; average earnings per hour, 42c. or 45c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; cash benefits, sickness, \$5 per week; death, \$100; body incorporated and registered. President, Hugh Paterson, Queen St. South; Corresponding Secretary, J. S. Dew, 131 Treburn Ave.; meets 2nd and 4th Thursdays in month.

SILVER CENTRE.

Name,—Western Federation Miners, No. 148. Organized Sept. 25, 1910; total membership, 150; average earnings per week, \$18; number of working hours first five days, 45; number on Saturday, 9; wages paid monthly; total number (union and non-union) employed at trade in locality, 175; no difference in wages or hours between members and non-members; cash benefits, sickness, \$7 per week; death, \$50; body incorporated and registered. President, C. W. Thomas, Silver Centre; Corresponding Secretary, Chas. H. Lowthian, Silver Centre; meets Sunday, 2 p.m.

SCHREIBER.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 387. Organized Sept. 6, 1889; total membership, 60; average earnings per week, \$20 to \$35; wages paid monthly; general cause of idleness, slackness of business; total number (union and non-union) employed at trade in locality, 70; no difference in wages or hours between members and non-members; special work for members, C.P.R. furnishes instruction car once a year for two weeks or so. President, William Hughes, Schreiber P.O.; Corresponding Secretary, E. E. Cambridge, Box 173, Schreiber; meets 1st Sunday, 2 p.m.; 3rd Wednesday, 8 p.m.

Name,—International Brotherhood of Maintenance of Ways Employees, No. 260. Organized August, 1904; total membership, 55; average earnings per hour, 16c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly. President, Thos. Bosler, Schreiber; Corresponding Secretary, W. Sparks, Schreiber; meets last Sunday in month.

SMITH'S FALLS.

Name,—Bricklayers', Masons', and Plasterers' International Union of America, No. 21. Organized November, 1902; total membership, 27; average earnings per week, \$21; average earnings per hour, 39c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 150; general cause of idleness, stormy weather and winter; total number (union and non-union) employed at trade in locality, 29; all are members of organization in locality; death benefits, \$100 to \$200; body incorporated. President, W. H. Rathwell, Smith's Falls; Corresponding Secretary, Adam Johnston, Box 231, Smith's Falls; meets 2nd and 4th Wednesdays in month.

Name,—International Brotherhood of Maintenance of Ways Employees, No. 136. Organized April, 1903; total membership, 70; average earnings per week, \$10.20; average earnings per hour, 17c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at trade in locality, 25; no difference in wages or hours between members and non-members; cash benefits, superannuation, \$20 per month; body incorporated and registered. President, F. Bragg, Avonmore, Ont.; Corresponding Secretary, A. J. Seal, Perth, Ont.; meets on call of President.

Name,—Brotherhood of Railway Trainmen, No. 527. Organized 1892; total membership, 70; average earnings per week, \$18; average earnings per hour, 27c.; no stated hours; wages paid monthly; average number of days idle per member during year, 50; general cause of idleness, trade conditions; total number (union and non-union) employed at calling in locality, 75; no difference in wages or hours between members and non-members; death benefits, \$500, \$1,000, \$1,350; no special work for members; body incorporated and registered. President, J. W. Thomas, Smith's Falls; Corresponding Secretary, A. M. Brown, Smith's Falls; meets 1st Monday and 3rd Wednesday.

STRATFORD.

Name,—Bricklayers', Masons' and Plasterers' Union, No. 24. Organized 1890; total membership, 24; average earnings per week, \$18; average earnings per hour, 40c.; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly and fortnightly; average number of days idle per member during year, 150; general cause of idleness, unfavourable weather and lack of material; total number (union and non-union) employed at trade in locality, 40; difference in wages and hours of those engaged at trade in locality, between members and non-members of organization, 20c.; death benefits, \$100 to \$250. President, H. Shom, Huron St.; Corresponding Secretary, W. L. Lewis, 107 Milton St.; meets 2nd and 4th Thursdays in month.

Name,—Cigar Makers' Union, No. 424. Organized 1899; total membership, male, 20; female, 2; average earnings per week, male, \$10 to \$12; female, \$10 to \$12; average earnings per hour, male, 20c. to 25c.; female, 20c. to 25c.; number of

working hours first five days, 40; number on Saturday, 7½; wages paid weekly; average number of days idle per member during year, 12; general cause of idleness, holidays; cash benefits, sickness, \$5 per week; death, \$50 to \$550; out of work benefits, \$3 per week. President, M. E. Whalen, 102 Grange St.; Corresponding Secretary, James Hagarty, 179 St. David St.; meets 1st Wednesday in month.

Name,—Order of Railway Conductors, No. 15. Organized Jan. 27, 1881; total membership, 28; average earnings per week, \$20; number of working hours per week varies; wages paid monthly; average number of days idle per member during year, varies; general cause of idleness, depression of business; total number (union and non-union) employed at calling in locality, 30; no difference in wages or hours between members and non-members; death benefits, \$1,000 to \$5,000. President, D. S. McHaffie, 231 Ontario St., Stratford; Corresponding Secretary, R. T. Buchanan, 37 Milton St., Stratford; meets 2nd and 4th Sundays in month.

Name,—Amalgamated Society of Engineers, No. 579. Organized 1851; total membership, 34; average earnings per week, \$15; average earnings per hour, 55c.; number of working hours first five days, 50; number on Saturday, 5; wages paid monthly; average number of days idle per member during year, regular holidays; no difference in wages or hours between members and non-members; cash benefits, sickness, \$2.50 per week; death, \$60; superannuation, \$1.75 to \$2.50 per week; out of work benefits, \$2.50 per week; body registered. President, Hugh Dickie, Burford St., Stratford; Corresponding Secretary, William Bell, 216 Douro St., Stratford; meets 2nd Saturday in month.

Name,—Brotherhood of Locomotive Engineers, No. 188. Organized 1876; total membership, 70; average earnings per week, \$30; wages paid monthly; general cause of idleness, repairs to engines, and depression of business; total number (union and non-union) employed at calling in locality, 5; no difference in wages or hours between members and non-members; death and disability benefits, \$1,500 to \$1,500; special work for members, classes of instructions; body incorporated. President, Thomas J. Dolan, 75 Bay St., Stratford; Corresponding Secretary, John Battley, 185 Douro St., Stratford; meets 1st and 3rd Sundays in month.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 38. Organized 1873; total membership, 70; wages paid monthly; general cause of idleness, slack business; total number (union and non-union) employed at calling in locality, 110; no difference in wages or hours between members and non-members; death benefits, \$1,000, \$1,500, \$2,000, and \$3,000; no special work for members; body incorporated and registered. President, Fred. Cosby, 33 Perth St.; Corresponding Secretary, Jno. F. Spencer, 93 Nile St.; meets 2nd and 4th Sundays in month.

Name,—International Typographical Union, No. 139. Organized 1900; total membership, 17; average earnings per week, \$12 to \$16; average earnings per hour, 25c. to 30c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; no idle days, considerable overtime; total number (union and non-union) employed at trade in locality, 20; non-union shops employ only boys; no local benefits. President, J. Carlin, "Herald" office; Corresponding Secretary, H. Miller, "Herald" office; meets 1st Saturday in month.

SUDBURY.

Name,—Bartenders' International League of America, No. 237. Organized Nov. 4, 1906; total membership, 14; average earnings per week, \$12; average earnings per hour, 20c.; number of working hours first five days, 50; number on Saturday, 13; wages paid monthly; no idle days; total number (union and non-union)

employed at trade in locality, half union, half non-union; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5 per week; death, \$50; body incorporated and registered. President, A. Gatieu, Sudbury; Corresponding Secretary, E. Charron, Sudbury; meets 1st Monday in month.

Name,—Journeymen Tailors' Union of America, No. 226; total membership, male, 8; female, 6; average earnings per week, male, \$16; female, \$9; average earnings per hour, male, 26c.; female, 18c.; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; total number (union and non-union) employed at trade in locality, male, 8; female, 6; cash benefits, sickness, \$5 per week, death, \$25 after six months; \$40 after 12 months; body incorporated and registered. President, M. Dupont; Corresponding Secretary, W. Perry, Box 150, Sudbury, Ont.; meets 2nd Monday in month.

THOROLD.

Name,—United Brotherhood of Carpenters and Joiners of America, No. 1677. Organized 1883; total membership, 21; average earnings per week, \$17.50; average earnings per hour, 37c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 60; general cause of idleness, winter months; total number (union and non-union) employed at trade in locality, 28; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union, 37c. per hour; non-union, 15c. per hour; death benefits, \$400; superannuation, \$200; out of work benefits, half pay; body incorporated and registered. President, H. N. Higger, Town Line; Corresponding Secretary, F. H. Parmeter, Caslon St.; meets 3rd Thursday in month.

TORONTO.

Name,—Journeymen Barbers' International Union, No. 517. Organized Feb. 3, 1909; total membership, 85; average earnings per week, \$12; number of working hours first five days, 50; number on Saturday, 14; wages paid weekly; average number of days idle per member during year, 90; general cause of idleness, slack during winter months; total number (union and non-union) employed at trade in locality, male, 500; female, 6; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-members work 6 hours per week more and average \$1 less; cash benefits, sickness, \$5 per week; death, \$75; body incorporated. President, W. D. Rockett, 350 Queen St. West; Corresponding Secretary, Leon E. Worthall, 20 Waverley Road; meets 4th Thursday in month.

Name,—Bartenders' Union and Benefit Society, No. 280. Organized Dec. 25, 1902; total membership, 313; average earnings per week, \$12 to \$16; average earnings per hour, 15c.; number of working hours first five days, 60; number on Saturday, 9; wages paid weekly and monthly; no idle days; total number (union and non-union) employed at calling in locality, 375; no difference in wages and hours of labour, between members and non-members; cash benefits, sickness, \$4 per week; death, \$50; body registered. President, Frank Walker, Grand Central Hotel; Corresponding Secretary, A. O'Leary, 218 Havelock St.; meets 4th Sunday.

Name,—International Alliance of Billposters and Billers, No. 40; total membership, 26; average earnings, \$12 per week; number of working hours first five days,

45; number on Saturday, 8; wages paid weekly; total number (union and non-union) employed at trade in locality, 26. President, W. Reeves, Majestic Theatre; Corresponding Secretary, J. Lavene, Star Theatre; meets 3rd Sunday in month.

Name,—Blacksmiths and Helpers, No. 318. Organized March 4, 1911; total membership, 20; average earnings per week, \$14.50; average earnings per hour, 24c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly and fortnightly; total number (union and non-union) employed at trade in locality, about 200. President, Robt. Armstrong, 33 Howard Ave.; Corresponding Secretary, E. Mason, 853 Lansdowne Ave.; meets 1st and 3rd Fridays every month.

Name,—International Brotherhood of Bookbinders, No. 28. Organized June, 1893; total membership, 170; average earnings per week, \$17.50; average earnings per hour, 36½c.; number of working hours first five days, 43¾; number on Saturday, 4¼; wages paid weekly; average number of days idle per member during year, 14; general cause of idleness, holidays; total number (union and non-union) employed at trade in locality, 310; death benefit, \$75. President, G. T. Hull, 1 Denison Ave.; Corresponding Secretary, C. R. Hurst, 363 Roxton Road; meets 2nd Monday.

Name,—International Union United Brewery Workers, No. 304. Organized June, 1902; total membership, 350; average earnings per week, \$13.50; average earnings per hour, 27c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; total number (union and non-union) employed at calling in locality, 350; all working are organized. President, Edward Harris; Corresponding Secretary, John Corcoran, Labour Temple, Toronto; meets 2nd and 4th Fridays in month.

Name,—International Union of United Brewery Workers. Organized 1902; total membership, 90; average earnings per week, \$13.50; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; total number (union and non-union) employed at trade in locality, 90. President, Jas. Dowling, 33 Sackville St.; Corresponding Secretary, Alf. Cheeseman, 62 Greenwood Ave.

Name,—Bricklayers', Masons', and Plasterers' Union, No. 2. Organized Nov. 15, 1881; total membership, 1,300; average earnings per week, \$17; average earnings per hour, 52½c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 50; general cause of idleness, weather, and shortage of material; total number (union and non-union) employed at trade in locality, 1,500; difference in wages or hours of labour of those engaged in trade in locality, between members and non-members, from 5c. to 2½c per hour; cash benefits, \$300. President, H. Fussell, 99 Balmoral Ave.; Corresponding Secretary, R. A. Watson, 2 Reid St.; meets every Tuesday.

Name,—Brick, Tile and Terra Cotta Workers, No. 19. Organized July 29, 1910; total membership, 21; average earnings per week, \$18; average earnings per hour, 35c.; number of working hours first five days, 45; number on Saturday, 8; wages paid fortnightly; average number of days idle per member during year, 7 months; general cause of idleness, inclement weather; total number (union and non-union) employed at trade in locality, 200; no difference in wages or hours of labour, between members and non-members; body incorporated and registered. President, W. Norris, 71 McMurray Ave., West Toronto; Corresponding Secretary, J. Howson, 24 Cawthra Ave., West Toronto; meets 1st and 3rd Fridays in month.

Name,—Bridge and Structural Iron Workers, No. 4. Organized May 14, 1900:
10 B.L.

total membership, 135; average earnings per week, \$13; average earnings per hour, 35c.; number of working hours first five days, 45; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, bad weather; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 1 hour per day, and 10c. per hour; death benefits, \$100; body registered. President, S. Gamble, 119 Denison Ave.; Corresponding Secretary, W. B. Gracie, 343 Symington Ave.; meets 1st and 3rd Tuesdays in month.

Name,—Builders' Labourers' Union, No. 1. Organized 1881; total membership, 1,100; average earnings per week, \$10; average earnings per hour, 28c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; number of days idle per member during year, 50; general cause of idleness, bad weather, and lack of material; total number (union and non-union) employed at trade in locality, 1,300; death benefit, \$75; reading-room during winter months for members. President, Geo. T. Drover, 11 Dorset St.; Corresponding Secretary, John M. Mackintosh, 48 Humbert St.; meets every Tuesday in month.

Name,—Carriage and Waggon Makers' Union, No. 85; total membership, 200; average earnings per week, \$11; average earnings per hour, 21c.; number of working hours first five days, 45 and 50; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 60; general cause of idleness, conditions of trade and over-supply; total number (union and non-union) employed at trade in locality, 400; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 1 hour per day, and 10c.; death benefits, \$50 to \$200. President, F. J. Shield, 42 Dagmar Ave.; Corresponding Secretary, H. Gain, 344 Clinton St.; meets 1st and 3rd Wednesdays in month.

Name,—Brotherhood of Railway Carmen, No. 258; total membership, 90; average earnings per week, \$10; average earnings per hour, 19c.; number of working hours first five days, 45; number on Saturday, 5; wages paid monthly; average number of days idle per member during year, 20; general cause of idleness, weather; total number (union and non-union) employed at trade in locality, 130; no difference in wages or hours of labour of members or non-members; body incorporated and registered. President, James Miller, 485 Clendenin Ave.; Corresponding Secretary, F. Gouge, 77 Vine Ave.; meets 3rd Wednesdays.

Name,—Brotherhood of Railway Carmen, No. 511. Organized September, 1907; total membership, 12; average earnings per week, \$9.60 and \$10.80; average earnings per hour, 16c. and 18c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 100; no difference in wages or hours between members and non-members. President, Frank Simpkins, 1 Nassau Place; Corresponding Secretary, William Smith, 125 Sydenham St., Toronto.

Name,—Amalgamated Society of Carpenters and Joiners (First Branch) No. 798. Organized June 4, 1860; total membership, 165; average earnings per hour, 35c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 30; general cause of idleness, inclement weather; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, some non-union men get as low as 20c. per hour, others get the rate or over; cash benefits, lack of employment, \$2.50 per week; sickness, \$3 per week; death, \$60; superannuation, \$2 per week; out of work benefits, grants from contingent

fund in cases of long-continued illness; clubroom and entertainment provided during three winter months; body registered. President, Ernest Wilkinson, 15 Markham Place; Corresponding Secretary, Jno. E. Walker, 307 Greenwood Ave.; meets alternate Mondays.

Name,—Amalgamated Society of Carpenters and Joiners (Second Branch), No. 799. Organized 1860; total membership, 70; average earnings per week, \$29.85; average earnings per hour, 34c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 16; general cause of idleness, inclement weather; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union members 35c. per hour, 44 hours per week; non-members 20c. per hour and upwards, and 44 to 55 hours per week; cash benefits, lack of employment, \$2.50 per week; sickness, 50c. per day; death, \$60; superannuation, \$2 per week; reading-room, concerts, etc.; provided for members; body incorporated and registered. President, H. Gallop, 44 McGill St.; Corresponding Secretary, H. E. Durance, 790 Lansdowne Ave.; meets alternate Mondays from January 2nd.

Name,—Amalgamated Society of Carpenters and Joiners, (Third Branch), No. 800. Organized 1860; total membership, 60; average earnings per week, \$15.40; average earnings per hour, 35c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 60; general cause of idleness, unsettled weather; total number (union and non-union) employed at trade in locality, 3,500; no difference in wages or hours between members and non-members; cash benefits, sickness, \$3 per week; death, \$60; superannuation, \$2 per week; out of work benefit, \$2.50 per week; body incorporated and registered. President, John K. Riley, 92 Davenport Road; Corresponding Secretary, George Thomson, 223 Lippincott St.; meets 2nd and 4th Wednesdays in month.

Name,—Amalgamated Society of Carpenters and Joiners, No. 801, Fourth Branch. Organized June, 1860; total membership, 97; average earnings per week, \$14; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly and fortnightly; average number of days idle per member during year, 14; general cause of idleness, severe weather; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, varies from 2c. to 15c. per hour, and no restriction as to hours; cash benefits, sickness, \$3 per week; death, \$60; superannuation, \$2 or \$1.75 per week; out of work benefits, \$2.50 for 12 weeks, \$1.50 for second 12 weeks; body registered in Great Britain. President, F. Moncur, 54 Sherley St.; Corresponding Secretary, A. J. Udall, 26 Horne Ave.; meets alternate Mondays from Jan. 2nd.

Name,—Amalgamated Society of Carpenters and Joiners, No. 802, Fifth Branch. Organized June 4, 1860; total membership, 35; average earnings per week, \$16.28; average earnings per hour, 37c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, one month, or sometimes more; general cause of idleness, winter months; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union men working from 25c. and upwards an hour; cash benefits, sickness, \$3 per week; death, \$60; superannuation, \$2 per week; out of work benefit, \$2.50 per week; tool benefit, up to \$75; accident, \$500; body incorporated and registered. Presi-

dent, G. E. Moore, 128 Erie Terrace, Gerrard St.: Corresponding Secretary, A. G. Sonnex, 59 Melville Ave.; meets every 2nd Tuesday in month.

Name,—Amalgamated Society of Carpenters and Joiners, No. 803, Sixth Branch. Organized June 4, 1860; total membership, 80; average earnings per week, \$14; average earnings per hour, 35c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 14; general cause of idleness, climatic conditions; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-members work for anything from 20c. per hour up, and all hours; cash benefits, sickness, \$3 per week; death, \$60, superannuation, \$175 to \$200; out of work benefits, \$2.50 for 12 weeks, \$1.50 for second 12 weeks; social evenings for members during winter; body registered in Great Britain. President, Jos. Carruthers, 603 Eastern Ave.; Corresponding Secretary, Walter Cooley, 89 Tiverton; meets 1st and 3rd Tuesdays in month.

Name,—United Brotherhood of Carpenters, No. 27. Organized Aug. 12, 1881; total membership, 275; average earnings per week, \$15.40; average earnings per hour, 35c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 60; general cause of idleness, bad weather; total number (union and non-union) employed at trade in locality, 1,400; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 1 hour more per day, 3c. to 10c. less per hour; death benefits, \$200. President, M. Myers, Walmer Road; Corresponding Secretary, W. H. Cordwell, 39 Adams St.; meets 1st and 3rd Fridays in month.

Name,—Brotherhood of Carpenters, No. 1799. Organized Dec. 12, 1906; total membership, 60; average earnings per week, \$16.28; average earnings per hour, 37c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 21; general cause of idleness, bad weather; total number (union and non-union) employed at trade in locality, 3,000; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-members work 1 and 2 hours a day more, and receive 5c. to 10c. per hour less; death benefits, \$200; special work for members, lessons on the steel square, and other problems. President, Gerald Baine, 39 Helena Ave., Wychwood, Toronto; Corresponding Secretary, Alex. Suttie, 9 Charles St. East, Toronto.

Name,—Cigarmakers' International Union, No. 27. Organized 1869; total membership, male, 362; female, 40; average earnings per week, male, \$10; female, \$10; average earnings per hour, male, 25c.; female, 25c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 30; general cause of idleness, dullness of trade; total number (union and non-union) employed at trade in locality, male, 362; female, 40; all are members of organization; cash benefits, sickness, \$5 per week; death, \$50 to \$550; out of work benefits, \$3 per week; body incorporated and registered. President, J. McCarthy, 118 Manning Ave.; Corresponding Secretary, J. Pamphilon, Room 106, 88 Church St.; meets 3rd Monday in each month.

Name,—Order of Railway Conductors, Div. No. 17. Total membership, 60; wages paid monthly; no difference in wages or hours between members and non-members; body registered and incorporated. President, John Deavitt, 399 Palmerston Ave.; Corresponding Secretary, A. Riley, 706 Markham St.; meets 1st and 3rd Sundays in month.

Name,—Order of Railway Conductors, No. 345. Organized 1893; total membership, 60; wages paid monthly; general cause of idleness, depression in trade; total number (union and non-union) employed at calling in locality, all union; no difference in wages or hours between members and non-members; body incorporated and registered. President, F. Hartley, 487 Brunswick Ave., Toronto; Corresponding Secretary, G. A. Wood, 61 Empress Crescent, Toronto; meets 2nd and 4th Sundays in month.

Name,—Cutters' and Trimmers' Protective Association, No. 185. Organized July, 1902; total membership, 90; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 12; general cause of idleness, trade conditions; total number (union and non-union) employed at trade in locality, 200; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, some non-union shops work 3 hours longer per week; sick benefits, \$4 per week; instruction for members in special order cutting. President, Fred. Healey, 36 Kippendam Ave.; Corresponding Secretary, H. A. Kellar, 59 Grange Ave.; meets 2nd and 4th Fridays in month.

Name,—International Brotherhood of Electrical Workers, No. 114; total membership, 160; average earnings per week, \$16; average earnings per hour, 37½c.; number of working hours first five days, 40; number on Saturday, 4; average number of days idle per member during year, 90; general cause of idleness, no work; total number (union and non-union) employed at trade in locality, 250; difference in wages and hours of those engaged at trade in locality, between members and non-members of organization, 19c. to 15c. per hour, and 2 hours daily. President, J. E. Duncan, 144 Jarvis St.; Corresponding Secretary, J. D. Hagerman, 1076 Bloor St. West; meets 1st and 3rd Thursdays in month.

Name,—International Brotherhood of Electrical Workers (Linemen), No. 353. Organized April, 1900; total membership, 350; average earnings per week, \$15; average earnings per hour, 33 1-3c.; number of working hours first five days, 45; number on Saturday, 9; wages paid weekly; total number (union and non-union) employed at trade in locality, 500; death benefit, \$100. President, James Taylor, 323 Salem Ave.; Corresponding Secretary, D. Niven, 232 Church St.; meets 1st and 3rd Wednesday.

Name,—Amalgamated Society of Engineers, No. 689. Organized 1857; total membership, 160; average earnings per week, \$14; average earnings per hour, 25c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly, fortnightly, and monthly; no difference in wages or hours between members and non-members; cash benefits, sickness, \$2.50 per week; death, \$60; superannuation, \$150 to \$250; out of work benefits, \$2.50; body registered in Great Britain. President, H. H. Ballantyne, 21 Burnfield Ave.; Corresponding Secretary, John M. Clements, 650 Shaw St.; meets alternate Mondays.

Name,—International Union of Steam Engineers, No. 152. Organized Jan. 1, 1902; total membership, 200; average earnings per week, \$14; number of working hours first five days, 50; number on Saturday, 10; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 500; no difference between members and non-members in wages; in plants running 24 hours, union men work 8 hours, and non-union 12; club-room for members in Labour Temple; sick benefits, \$3 per week. President, J. G. Jones, 6 King St. W.; Corresponding Secretary, Robert Shepherd, 210 Berkeley St.; meets 2nd and 4th Wednesdays in month.

Name,—International Union Steam Engineers (Hoisting and Portable), No. 356. Organized Jan. 3, 1908; total membership, 70; average earnings per week, \$20; average earnings per hour, 40c.; number of working hours first five days, 45; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 100; general cause of idleness, weather and inactive trade; total number (union and non-union) employed at trade in locality, 120; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union 10 to 12 hours per day, wages 25c. per hour and upwards; death benefits, 100; reading and instruction room for members in Labour Temple; body incorporated and registered. President, Corresponding Secretary, T. J. Murphy, 997 Lansdowne Ave.; meets 1st and 3rd Wednesdays in month.

Name,—Electrotypers' and Stereotypers' Union, No. 21; total membership, 69; average earnings per week, \$20; number of working hours first five days, 43; number on Saturday, 5; wages paid weekly; death benefit, \$100. President, H. Bartley, 973 Logan Ave.; Corresponding Secretary, C. W. Lafferty, 124 Woolfrey Ave., Toronto; meets 1st Thursday in month.

Name,—National Association of Marine Engineers, No. 1. Organized 1900; total membership, 50; average earnings, assistant engineers, \$60 per month and board; 3rd class engineers in charge of small boats, \$70 to \$90 per month and board; chief engineer, \$800 to \$1,100 per year and board; superintending engineers receive more; average number of days idle per member during year, season varies according to class of service engaged in, but in majority of cases men are engaged from 9 to 10 months per year; all are members of association; wages paid monthly; no difference in wages or hours between members and non-members; educational work weekly during winter months. President, J. W. Aston, 85 Cowan Ave.; Corresponding Secretary, E. A. Prince, 24 Montray St.; meetings arranged at close of navigation.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 67. Organized March, 1877; total membership, 48; wages paid monthly; total number (union and non-union) employed at trade in locality, 50; no difference in wages or hours between members and non-members; sick benefits, \$3 per week; no special work for members. President, G. E. Crowhurst, 90 Wolseley St.; Corresponding Secretary, Jas. Pratt, 218 Fern Ave.; meets 1st and 3rd Sunday in month.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 262. Organized Dec. 1, 1873; total membership, 260; average earnings per week, \$30; wages paid monthly; general cause of idleness, irregular work; total number (union and non-union) employed at calling in locality, 280; no difference in wages or hours between members and non-members; death benefits, \$500, \$1,000, \$1,500, \$2,000, \$3,000. President, W. Hunter, 75 Hook Ave., West Toronto; Corresponding Secretary, W. H. Blevins, 74 Fairview Ave., West Toronto; meets 1st Tuesday, 2nd and 4th Sundays in month.

Name,—United Garment Workers of America, No. 202. Organized 1907; total membership, female, 110; average earnings per week, female, \$8; number of working hours first five days, 44; number on Saturday, 4; wages paid weekly; number of days idle per member during year, 30; general cause of idleness, inventory, and repairs; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, \$2 in wages, and up to 6 hours in time; body registered. President, I. Barbeau, 843 Dovercourt Road; Corresponding Secretary, S. I. Cherry, 60 Defoe St.; meets 2nd Monday in month.

Name,—Glass Bottle Blowers International Association, No. 66. Total membership, 70; piece work; average earnings per hour, 50c.; number of working hours first five days, 42½; number on Saturday, 7½; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, foreign competition and agreement with firm; total number (union and non-union) employed at trade in locality, 91; death benefits, \$500. President, George Gardner, Diamond Glass Co.; Corresponding Secretary, Howard Munn, 164 Argyle Street; meets 2nd and 4th Saturdays in month.

Name,—Amalgamated Glass Workers International Association, No. 21. Organized May 16, 1902; total membership, 72; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly and fortnightly; general cause of idleness, slackness in trade; total number (union and non-union) employed at trade in locality, 105; no difference in wages or hours between members and non-members; death benefits, \$50 to \$75. President, Richard Shuttleworth, 70 Spruce Street; Corresponding Secretary, James Hickey, 23 Wardell Street; meets 1st and 3rd Fridays in month.

Name,—Granite Cutters' International Association. Reorganized November 20, 1905; total membership, 40; average earnings per week, \$17; average earnings per hour, 37½c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; no record of idle days; general cause of idleness, winter weather; total number (union and non-union) employed at trade in locality, 75; cash benefits, death, \$200; superannuation, \$10 monthly after 62 years of age. President, W. Nettleship, 44 Baker Avenue; Corresponding Secretary, W. H. Brown, 29 St. Clair Avenue East; meets 4th Thursday in month.

Name,—Lithographers' International Association, No. 12. Organized eleven years ago; total membership, 102; average earnings per week, \$18; number of working hours first five days 43¾; number on Saturday, 4¼; wages paid weekly; employment generally steady; sometimes business slack; total number (union and non-union) employed at trade in locality, 200; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, \$2 to \$3, according to proficiency; death benefits, \$500; no special work for members. President, W. Simpson, 11 Burnfield Avenue; Corresponding Secretary, James H. Christie, 104 Palmerston Avenue; meets 2nd and 4th Wednesdays in month.

Name,—International Longshoremen's Association, No. 646. Organized September 20, 1906; total membership, 30; number of working hours per week, our work is day and night, except Sunday; wages paid weekly; general cause of idleness, conditions of trade; total number (union and non-union) employed at trade in locality 24; no difference in wages or hours between members and non-members. President, J. Dowling, 33 Sackville Street; Corresponding Secretary, S. Stalford, 46 Curzon Street; meets 1st Sunday in month.

Name,—International Association of Machinists, No. 235. Organized July 13, 1892; total membership, 426; average earnings per week, \$13.30 to \$18; average earnings per hour, 25c. to 30c.; number of working hours first five days, 45 and 50; number on Saturday, 5; wages paid weekly and fortnightly; average number of days idle per member during year, uncertain; general cause of idleness, depression in trade; total number (union and non-union) employed at trade in locality, 1,200; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, union, 9 hours; non-union, 10;

cash benefits, sickness, \$3 per week; death, \$50 to \$200; out of work benefits, lodge dues; classes for discussion of economics and mechanics. President, W. Hagen, 844 Queen Street East; Corresponding Secretary, John O. Clayton, 141 Sumach Street; meets 2nd and 4th Wednesdays in month.

Name,—Malers' Union (I. T. U.), No. 5. Organized November, 1894; total membership, 37; average earnings per week, \$17; average earnings per hour, 41c.; number of working hours first five days, 35; number on Saturday, 7 (night work 42 hours per week, day work 48 per week); wages paid weekly; total number (union and non-union) employed at trade in locality, 50; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, about 40 per cent. in favour of members; cash benefits, death, \$75; superannuation, \$4 per week; no special work for members. President, J. G. Gallagher, 50 Beaconsfield Avenue; Corresponding Secretary, G. A. Webber, 2 Wineva Avenue; meets 1st Monday in month.

Name,—International Association of Marble Workers, No. 12. Total membership, 56; average earnings per hour 41c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 4 to 6 weeks; general cause of idleness, buildings not ready; total number (union and non-union) employed at trade in locality, 90; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, 2 hours, 8c.; death benefits, \$50. President, W. Mullen, 10 William Street; Corresponding Secretary, W. Davey, 686 Shaw Street; meets 1st and 3rd Thursdays in month.

Name,—Metal Polishers', Buffers', Platers' and Brassworkers' Union, No. 21. Organized August, 1890; total membership, 80; average earnings per week, \$16.50; average earnings per hour, 32½c.; number of working hours first five days, 45 to 50; number on Saturday, 4½ to 5; wages paid weekly and fortnightly; average number of days idle per member during year, 25; general cause of idleness, slackness of trade; total number (union and non-union) employed at trade in locality, 125; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, about 20 per cent. in favour of members; cash benefits, sickness, \$3 per week; death, \$50 to \$150; out of work benefits, \$1 per month dues. President, James Spring, 100 Bellwoods Avenue; Corresponding Secretary, W. Driscoll, 467 Gerrard Street East; meets 2nd and 4th Wednesdays in month.

Name,—International Moulders Union, No. 207. Organized January 5, 1911; total membership, 48; average earnings per week, \$15; average earnings per hour, 27½c.; number of working hours first five days, 50; number on Saturday, 5; wages paid weekly and fortnightly; total number (union and non-union) employed at trade in locality, 80; no difference in hours of labour between members and non-members; cash benefits, sickness, \$5 per week; death, \$100 to \$200; out of work benefit, stamps. President, A. V. Mann, 44 Geneva Avenue; Corresponding Secretary, W. G. Jones, 155 Langley Avenue; meets 1st and 3rd Fridays in month.

Name,—International Moulders Union, No. 28. Organized 1860; total membership, 475; average earnings per week, \$17; average earnings per hour, 34c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly and fortnightly; average number of days idle per member during year, 25; general cause of idleness, depression in trade; total number (union and non-union) employed at trade in locality 750; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organiza-

tion, members work 9 hours per day, non-members 10 hours for the same pay or less; cash benefits, sickness, \$5.40 per week; death, \$100 to \$200; out of work benefits, dues remitted. President, Robert Harper, 92 O'Hara Avenue; Corresponding Secretary, Robert Harris, 110 Ossington Avenue; meets 1st and 3rd Wednesdays in Labour Temple.

Name,—Moving Picture Machine Operators' Union, No. 173. Organized October 15, 1909; total membership, 30; average earnings per week, \$15; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 50; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union get less; no cash benefits. President, Geo. Mehl, 556 Church Street; Corresponding Secretary, W. D. Shank, 42 Henderson Avenue; meets 1st and 3rd Sundays in month.

Name,—International Musical Protective Association, No. 149. Organized December 2, 1887; total membership, male, 570; female, 30; average earnings per week, male, \$15; female, \$12; number of working hours first five days, 25; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 10 to 60; general cause of idleness, theatres closed; cash benefits, sickness, \$3 per week; death, \$50; body incorporated and registered. President, J. E. Jarrott, 221 Dunn Avenue; Corresponding Secretary, Jos. Ball, 258 Augusta Avenue; meets 1st Sunday in month.

Name,—Brotherhood of Painters, Decorators and Paperhangers' of America, No. 3. Organized April 24, 1907; total membership, 100; average earnings per week, \$15.40; average earnings per hour, 35c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 60 to 90; general cause of idleness, weather and slackness of trade; total number (union and non-union) employed at trade in locality, 200; difference in wages and hours between members and non-members, 1 to 2 hours per diem; death benefits, \$100 to \$250; reading room for members during winter months; body incorporated. President, Jas. Butler, 297 Bolton Avenue; Corresponding Secretary, W. C. King, 183 Lippincott Street; meets 2nd and 4th Wednesdays in month.

Name,—Patternmakers' League of North America. Organized 1896; total membership, 92; average earnings per week, \$19.50; average earnings per hour, 37½c.; number of working hours, first five days, 45 and 50; number on Saturday, 4½ and 5; wages paid fortnightly; average number of days idle per member during year, 12; general cause of idleness, lack of work; total number (union and non-union) employed at trade in locality, 130; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, from 25c. to \$1.00; cash benefits, sickness, \$4.00 per week; death, \$50 to \$400; superannuation \$4 to \$5. President, Fred. Bancroft, 18 Sinclair Avenue; Corresponding Secretary, Jas. Graham, 350 Delaware Avenue; meets 2nd and 4th Mondays in month.

Name,—Photo Engravers' International Union, No. 35. Total membership, 51; average earnings per week, \$20; number of working hours first five days, 42½; number on Saturday, 4; wages paid weekly; total number (union and non-union) employed at trade in locality, 75; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, hours about the same; non-union wages are from \$7 upwards; death benefits, \$100.

President, Alfred Rothwell, 26 Major Street; Corresponding Secretary, W. Clark, 639 Broadview Avenue; meets 1st Monday in month.

Name,—Piano, Organ and Musical Instrument Workers' Union, No. 39. Organized December 2, 1902; total membership, 400; average earnings per hour, 30c. to 32c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; some fortnightly; total number (union and non-union) employed at trade in locality, 600; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5 per week; death, \$50 to \$300; death of wife, \$40. Corresponding Secretary, R. J. Whitten, 112 Russet Avenue; meets 2nd and 4th Tuesdays in month.

Name,—Operative Plasterers' International Association, No. 48. Total membership, 240; average earning per hour, 50c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, cold weather; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union receive from 35c. to 40c. per hour; death benefits, \$100 by local, \$200 by International. President, George McGill, 265 Margueretta Street; Corresponding Secretary, James Ward, 168 Symington Avenue; meets 2nd and 4th Thursdays in month.

Name,—Plasterers' Labourers' Association, No. 1. Organized 1881; total membership, 250; average earnings per week, \$9; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 90; general cause of idleness, slackness of trade and weather conditions; death benefits, \$50. President, C. Collett, 330 Broadview Avenue; Corresponding Secretary, J. Fidler, Mount Dennis P. O., Ont.; meets 1st and 3rd Tuesdays in month.

Name,—United Association Plumbers, Gas and Steam Fitters, No. 46. Organized, October 11, 1889; total membership, 375; average earnings per week, \$17.60; average earnings per hour, 40c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 14; general cause of idleness, holidays and weather; total number (union and non-union) employed at trade in locality, 50; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, from 21½c. to 15c. per hour less; cash benefits, sickness, \$5 per week; death, \$100; superannuation, \$300, \$400, \$500; a course of lectures during winter, reading room all the year. President, F. W. Jenkins, 355 Delaware Avenue; Corresponding Secretary, D. Bulloch, 256 Kingston Road; meets 2nd and 4th Fridays in month.

Name,—Pressfeeders' Union. Organized 1897; total membership, 200; average earnings per week, \$12.25; average earnings per hour, 27c.; number of working hours first five days, 48; number on Saturday, 4½; wages paid weekly; average number of idle days per member during year, 4 months; cause of idleness, trade slack; total number (union and non-union) employed at trade in locality, 80; no difference in wages or hours of labour between members and non-members; cash benefits, death, \$150. President, F. Robinson, 102 King St. West; Corresponding Secretary, J. R. Mason, 2 Leonard Avenue; meets first Monday in month.

Name,—Textile Workers of America, No. 695 (Brussels Carpet). Organized May 8, 1909; total membership, 114; number of working hours first five days, 50; number on Saturday, 5; total number (union and non-union) employed at trade in locality, 114; death benefits, \$35. President, William Allbutt, Cockburn Avenue,

West Toronto; Corresponding Secretary, A. H. Woodhead, 10 Alma Avenue; meets 1st Friday in month.

Name,—Typographical Union, No. 91. Organized September 13, 1844. Total membership, male, 975; female, 3; average earnings per week, male, \$12; female, \$10; average earnings per hour, male, 33c.; female, 16c.; number of working hours first five days, 43¾; number on Saturday, 4¼; wages paid weekly; average number of days idle per member during year, 20; cause of idleness, holidays and lack of work in the summer months; total number (union and non-union) employed at trade in locality, male, 1,100; female, 50; difference in wages or hours of labour of those engaged in trade in locality between members and non-members of organization, 25c. per in wages and same hours; sick benefit, \$1 per week; death, \$125; old age pension, \$4 per week for over 60 years of age and 20 years membership; no special work for members; incorporated and registered. President A. E. Thompson; Corresponding Secretary, Samuel Hadden, 110 Front St. E.; meets 1st Saturday in month.

Name,—Amalgamated Sheet Metal Workers' International Union, No. 30. Organized August 6th, 1896; total membership, 150; average earnings per hour; 33½c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; total number (union and non-union) employed at trade in locality, between 500 and 600; non-union receive as low as 18c. per hour; cash benefits, death \$100; special work pattern drafting for members; not incorporated or registered. President, John Lawson, Davisville P. O.; Corresponding Secretary, J. S. Chapman, 294 Margueretta St.; meets 1st and 3rd Friday in each month.

Name,—Slate and Tile Roofers' Union, No. 39. Organized January, 1910; total membership, 29; average earnings per week, \$12; average earnings per hour, 35c.; number of working hours first five days, 45; number on Saturday, 5; cause of idleness, wet and cold weather; total number (union and non-union) employed at trade in locality, 40; cash benefits, death \$100; body incorporated and registered. President, James Hall, 108 Claremont St.; Corresponding Secretary, Arthur Pullan, 194 Bleecker St.; meets 1st and 3rd Monday in month.

Name,—Journeyman Stonecutters' Association of North America. Organized December 5, 1853; total membership, 150; average earnings per week, \$22; average earnings per hour, 50c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 120 to 150; cause of idleness, slackness of trade and bad weather; difference in wages or hours of labour of those engaged in trade in locality, between members and non-members of organization, non-members get 35c. to 50c.; union all get 50c.; cash benefits, death, \$100. President, Thos. Woods, 24 McCaul St.; Corresponding Secretary, Harry Newson, 41 River St.; meets 2nd and 4th Fridays in month.

Name,—Stonemasons' Union, No. 26. Organized June, 1904; total membership, 220; average earnings per week, \$13; average earnings per hour, 50c.; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 4 months; cause of idleness, bad weather and no work; total number (union and non-union) employed at trade in locality, 260; cash benefits, death, \$100 to \$200; body incorporated and registered. President, J. E. Jones, 36 Hillsboro Avenue; Corresponding Secretary, Chas. Robb, 901 Shaw St.; meets 1st and 3rd Thursdays in month.

Name,—Amalgamated Association of Street and Electric Railway Employees of America, No. 113. Organized August, 1893; total membership, 1,240; average earnings per week, \$13.50; average earnings per hour, 21c. 1st year, 23c. 2nd year,

25c. 3rd year, and uniforms; number of working hours first five days, 50; number on Saturday, 10; wages paid fortnightly; no idle time; total number (union and non-union) employed at calling in locality, 1,310; no differences in wages or hours of labour between members and non-members; cash benefits, sick, \$3 per week and free doctor and medicine; death, \$100; body incorporated and registered. President, H. C. Johnston, 78 Grant St.; Corresponding Secretary, Jos. Gibbons, Room 4 Labour Temple; meets 1st Monday 8 p.m. and 3rd Sunday 2.30 p.m. each month.

Name,—Journeyman Tailors' Union of America, No. 132. Organized 1890; total membership, 210 male; 40 female; average earnings per week, male, \$18; female, \$7; average earnings per hour, male, 25c.; female, 15c. to 20c.; wages paid weekly; average number of days idle per member during year, 60; general cause of idleness, slack seasons, August and February; total number (union and non-union) employed at trade in locality, male, 400; female, 200; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5 per week; death, \$100; body registered. President, Geo. Sangster, 68 Vermont Avenue; Corresponding Secretary, James Watt, Labour Temple, 167 Church Street; meets 4th Monday in month.

Name,—Journeyman Tailors International Union of America, No. 156. Organized 1883; total membership, male, 11; female, 8; average earnings per week, male, \$13; female, \$9; average earnings per hour, male, 22c.; female, 22c.; hours of labour, piece work; wages paid fortnightly; average number of days idle per member during year, 30; general cause of idleness, short work; total number (union and non-union) employed at trade in locality, male, 11; female, 8; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5 per week; death, \$100; body registered. President, T. Curttis, c-o Agnew, Merchant Tailor; Corresponding Secretary, W. W. Greenwood, 213 Symington Avenue; meets 1st Monday in month.

Name,—Team Owners' Association. President, Joseph Caldwell, 33 Hamilton Street, Toronto; Corresponding Secretary, J. Gosnell, 102 Sherbourne Street, Toronto; meets 2nd and 4th Thursdays in month.

Name,—International Brotherhood of Teamsters, No. 457. Organized October, 1904; total membership, 60; average earnings per week, \$12 to \$13; average earnings per hour, 22c. and 20c.; number of working hours first five days, 50; number on Saturday, 10; no idle days; total number (union and non-union) employed at trade in locality, 350 or 400; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, from 1c. to 3c.; no special work for members. President, Jas. Dutton, 18 Whithy Avenue; Corresponding Secretary, H. R. Barton, 36 Sully Crescent; meets 1st and 3rd Sunday at 2.30 p.m.

Name,—Commercial Telegraphers' Union, Div. No. 1. C. P. R. System. Organized May, 1909; total membership, male, 65; female, 10; wages paid monthly; total number (union and non-union) employed at calling in locality, 700 on C. P. R. System, 85 on Ontario Division; no difference in wages or hours between members and non-members; no cash benefits, but insurance department separate. President, M. Mackay, 79 Hutchinson Street, Montreal, P.Q.; Corresponding Secretary, C. E. Hill, 362 Brock Avenue, Toronto; meets once a month.

Name,—Telegraphy, Covering Canadian Pacific Railway System. Organized 1895; total membership, male, 1,679; female, 4; average earnings per month, \$70; wages paid monthly; no idle days during year; total number (union and non-union) employed in locality, male, 1,765; female, 4; no difference in wages or hours of

labour between members or non-members; cash benefits, as insured in benefit dept. President, G. D. Robertson, Box 205, Welland, Ont.; Corresponding Secretary, G. D. Norris, Brandon, Man.; meets at call of Chairman.

Name,—International Union of Tilelayers, No. 37. Organized 1902; total membership, 60; average earnings per week; \$19; average earnings per hour 45c.; number of working hours first five days, 40; number on Saturday, 4; wages paid weekly; total number (union and non-union) employed at trade in locality; 60; no difference in wages or hours of labour between members or non-members. President, Chas. Dickson, 1006 Bathurst St.; Corresponding Secretary, Wm. S. Gray, 37 Essex Ave.; meets 1st and 3rd Fridays in month.

Name,—Brotherhood of Railway Trainmen, No. 322. Organized January 23rd, 1889; total membership, 170; average earnings per week, \$15; average earnings per hour, 28c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; total number (union and non-union) employed at calling in locality, 225; working hours uncertain; no difference in wages or hours between members and non-members; death benefits, \$500 to \$2,000; body registered. President, L. S. Ward, 234 Pearson Avenue; Corresponding Secretary, Henry T. Meredith, 282 Crawford Street; meets 1st and 3rd Sundays in month.

Name,—Brotherhood of Railway Trainmen, No. 255. Organized March, 1887; total membership, 351; average earnings per week, \$20 to \$35; average earnings per hour, 24c. to 36c.; working hours vary; wages paid monthly; average number of days idle per member during year, vary; general cause of idleness, slackness of freight; total number (union and non-union) employed at calling in locality, 450; no difference in wages or hours between members and non-members; death benefits \$500, \$1,000, \$1,350; body incorporated and registered. President, T. L. H. McGuire, 115 Fermanagh Avenue; Corresponding Secretary, J. H. Davison, 168 St. John's Road; meets 1st and 3rd Sundays; every Monday except 1st and 3rd.

Name,—Upholsterers' Union, No. 30. Total membership, 75; average earnings per week, \$15.50; average earnings per hour, 32½c.; number of working hours first five days, 44; number on Saturday, 4; wages paid weekly; average number of days idle per member during year, 20; cause of idleness, slack season; total number (union and non-union) employed at trade in locality, 100; no difference in wages or hours of labour between members and non-members of organization; cash benefits, sick, \$4 per week for 4 consecutive weeks; body incorporated and registered. President, George Moore, 727 Gladstone Avenue; Corresponding Secretary, Wm. Ovens, 283 Grace St.; meets 1st and 3rd Friday.

Name,—Webb Pressmen's Union, No. 1. Organized August, 1893; total membership, 54; average earnings per week, \$18; average earnings per hour, 37½c.; number of working hours first five days, 40; number on Saturday, 8; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality, 54. President, C. Hewitt, Seaton Street; Corresponding Secretary, Wm. Hall, 113½ Lansdowne Avenue; meets 3rd Monday in month.

Name,—Wood, Wire and Metal Lathers' Union, No. 97. Organized 1911; total membership, 115; average earnings per week, \$9 to \$12, according to grade; number of working hours first five days, 40; number on Saturday, 4; wages paid fortnightly; average number of days idle per member during year, 3 to 4 months; general cause of idleness, dullness of trade during winter months; total number (union and non-union) employed at trade in locality, 150; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, non-union, 1 to 2 hours more per day and from 25c. to 75c.

per day less than union men; death benefit, \$100. President, Parker Franks; Corresponding Secretary, George Coffey, 134 Sheridan Avenue; meets every Tuesday, 8 p.m.

UDNEY.

Name,—International Brotherhood of Maintenance of Way Employees. Organized September 18, 1909; total membership, 80; average earnings per week, \$10; average earnings per hour, 16c.: number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days; total number (union and non-union) employed at calling in locality, 120; no difference in wages or hours between members and non-members. President, J. Desmond, Udney P. O., Ont.

WALLACEBURG.

Name,—Glass Bottle Blowers' Association of America, No. 70. Organized 1894; total membership, 87; average earnings per week, \$30; average earnings per hour, 54c.: number of working hours first five days, 44; number on Saturday, 5; wages paid fortnightly; average number of days idle per member during year, 65; general cause of idleness, shut down for repairs; total number (union and non-union) employed at trade in locality, 120; difference in wages and hours of labour of those engaged at trade in locality, between members and non-members of organization, \$2 to \$3 per day, and from 1 to 3 hours per day; death benefits, \$500; body incorporated and registered. President, D. A. Haye, 930-932 Witherspoon Building, Philadelphia, Pa.; Corresponding Secretary, W. Tanner, 930-932 Witherspoon Building, Philadelphia, Pa.; meets 1st and 3rd Saturdays in month. Rec. Sec., A. M. Armstrong, Branch 70, Wallaceburg, Ont.

WELLAND.

Name,—Bricklayers, Masons and Plasterers International Union, No. 32. Total membership, 20; average earnings per week, \$17; average earnings per hour, 45c.: number of working hours first five days, 15; number on Saturday, 9; wages paid weekly; average number of days idle per member during year, 120; general cause of idleness, bad weather and lack of material; total number (union and non-union) employed at trade in locality, 20; no difference in wages or hours between members and non-members; death benefit, \$120; body registered. President, George Scott, Welland; Corresponding Secretary, C. Roberts, Welland; meets every 2nd Wednesday in month.

Name,—Amalgamated Society of Carpenters and Joiners, No. 809. Organized June, 1906; total membership, 17; average earnings per week, \$15.50; average earnings per hour, 30c.: number of working hours first five days, 45 and 50; number on Saturday, 9 and 10; wages paid weekly and fortnightly; average number of days idle per member during year, 10; general cause of idleness, inclement weather; total number (union and non-union) employed at trade in locality, 100; difference in wages between union and non-union men, 2½c. per hour; cash benefits, lack of employment, \$2.50 per week; sickness, \$3 per week; death, \$60; superannuation, \$2 per week; out of work benefits, contingent fund in case of hardship; body incorporated and registered. President, William Powell, Welland P.O.; Corresponding Secretary, Alfred Laing, Box 121, Welland; meets 2nd and 4th Mondays in month.

Name,—United Brotherhood of Carpenters and Joiners, No. 969. Organized January, 1902; total membership, 38; average earnings per week, \$15; number of working hours first five days, 45, some 50; number on Saturday, 9; wages paid weekly: total number (union and non-union) employed at trade in locality, 100; no difference in wages or hours between members and non-members; death benefits, \$200; body registered. President, Walter E. Mann, Helens Avenue; Corresponding Secretary, Byron Jackson; meets 2nd and 4th Fridays in month.

Name,—International Moulders' Union, No. 472. Organized November 1, 1907; total membership, 53; average earnings per week, $27\frac{1}{2}c.$ to $32\frac{1}{2}c.$; number of working hours first five days, 50; number on Saturday, 10 in winter, 5 in summer; wages paid fortnightly; total number (union and non-union) employed at trade in locality, 53; cash benefits, sickness, \$5.40 per week; death, \$100 to \$200; out of work benefits, stamps. President, Reuben Casson, Welland Post Office; Corresponding Secretary, Edgar Jones, Box 272, Welland; meets 1st and 3rd Wednesday in month.

WINDSOR.

Name,—Journeymen Barbers' Union, No. 451. Organized October 16, 1902; total membership, 27; average earnings per week, \$12; number of working hours first five days, $62\frac{1}{2}$; number on Saturday, $16\frac{1}{2}$; wages paid weekly: average of days idle per member during year, none except holidays; total number (union and non-union) employed at trade in locality, 40; no difference in wages or hours of labour of those engaged in trade in locality, between members and non-members of organization: we have city by-law governs hours; cash benefits; sick benefits, \$5 per week; death benefits, \$75 to \$500. President, Andrew Kenney, 49 Sandwich St. West; Corresponding Secretary, Arthur Wickens, 18 Ouelette Avenue; meets 4th Wednesday.

Name,—Bricklayers' Masons' and Plasterers' International Union, No. 6. Organized 1895; total membership, 35; average earnings per week, \$29.70; average earnings per hour, 55c.; number of working hours first five days, 45; number on Saturday, 5; wages paid weekly; average number of days idle per member during year, 90; general cause of idleness, winter and bad weather: total number (union and non-union) employed at trade in locality, 40; no difference in wages or hours of labour of those engaged in trade in locality, between members and non-members of organization, none: cash benefits, sickness, helped, death, \$100 to \$200. President, Robt. Small, 3 Alexander St., Walkerville; Corresponding Secretary, Rupert G. Thompson, 72 Cameron Avenue; meets every Tuesday.

Name,—Order of Railway Conductors, No. 494. Organized 1900; total membership, 40; average earnings per week, \$18; average earnings per hour, 30c.; number of working hours first five days, 50; number on Saturday, 10; wages paid monthly; no idle days: total number (union and non-union) employed at trade in locality, 50; no difference in wages or hours between members and non-members; death benefit, insurance. President, John Merritt, 14 Pelisher Street; Corresponding Secretary, E. Jackson, 114 Goyeau Street; meets 2nd and 4th Sunday afternoons.

Name,—Brotherhood of Locomotive Engineers, No. 390. Organized, 1892; total membership, 22; average earnings per week, \$25; average earnings per hour, 36c.; wages paid monthly; no difference in wages or hours between members and non-members; cash benefits, death optional. President, Wm. Latcham, 22 Parent Avenue; Corresponding Secretary, Geo. Richardson, 59 Aylmer St.; meets second and fourth Tuesdays.

Name,—National Association of Marine Engineers, No. 11. Organized June, 1903; total membership, 12; average earnings per week, \$22; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; total number (union and non-union) employed at trade in locality, 26; no difference in wages or hours of labour of those engaged in trade in locality, between members and non-members of organization. President, Alex. McDonald, 28 Crawford Ave.; Corresponding Secretary, Neil Maitland, 221 London St.

Name,—Brotherhood of Locomotive Firemen and Enginemen, No. 121. Organized June 6, 1890; total membership, 42; average earnings per week, \$18; average earnings per hour, 23c.; number of working hours first five days, 60; number on Saturday, 12; wages paid monthly; average number of days idle per member during year, 30; general cause of idleness, leave of absence and suspensions; total number (union and non-union) employed at calling in locality, 13; no difference in wages between members and non-members; death benefits, policy claims; body incorporated and registered. President, Joseph L. Pero, 47 Aylmer Avenue, Windsor; Corresponding Secretary, A. R. Butler, 28 Glengarry Avenue, Windsor; meets 1st Sunday 2.30 p.m., and 4th Tuesday at 8.30 p.m.

Name,—Brotherhood of Railway Trainmen, No. 316. Organized, 1898; total membership, 110; average earnings per week, \$18; wages paid monthly; general cause of idleness, slackness during navigation through summer months; total number (union and non-union) employed at trade in locality, 200; no difference in wages or hours between members and non-members; sick benefits, provident society, body incorporated and registered. President, E. J. White, Fort Street, Detroit, Michigan; Corresponding Secretary, Chas. Wildrick, 168 Dougall Avenue, Windsor; meets 1st and 3rd Wednesdays; 2nd and 4th Sundays in month.

Name,—Typographical Union, No. 553. Organized September 30, 1909; total membership, 14; average earnings per week, \$14; number of working hours first five days, 48; wages paid weekly; total number (union and non-union) employed at trade in locality, 17; difference in wages or hours of labour of those engaged in trade in locality, between members and non-members of organization, non-union is \$2 less per week; cash benefits, death; body registered. President, W. J. Walker, 59 Bruce Avenue; Corresponding Secretary, Geo. E. Marentette, 98 Albert St.; meets 2nd Tuesday in each month.

WOODSTOCK.

Name,—Bricklayers' and Masons' Union, 22. Organized, December 5, 1902; total membership, 27; average earnings per week, \$21; average earnings per hour, 40c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 120; general cause of idleness, winter weather; total number (union and non-union) employed at trade in locality, 27; no difference in wages or hours of labour, between members and non-members of organization; cash benefits, death \$200; special work, we have under consideration the opening of reading room for next winter; body incorporated and registered. President, Alfred Hay, Woodstock, P. O.; Corresponding Secretary, E. Johnston, 15 Norwich Avenue; meets 2nd and 4th Tuesday.

Name,—International Moulders' Union, No. 429. Total membership, 20; average earnings per week, \$15; average earnings per hour, 30c.; number of working hours first five days, 50; number on Saturday, 9; wages paid weekly; average number of days idle per member during year, 100; general cause of idleness, trade

slack; total number (union and non-union) employed at trade in locality, 40; difference in wages and hours of those engaged at trade in locality, between members and non-members of organization, union \$3 per day; non-union, \$2.50 per day; cash benefits, sickness, \$5.40 per week, death, \$100; out of work benefits, dues remitted; body incorporated. President, William Long, 265 Mill Street; Corresponding Secretary, H. E. Porter, Box 745, Woodstock; meets 3rd Friday in month.

Name,—Journeyman Tailors' Union of America, No. 33. Organized December 4, 1890; total membership, male, 5; female, 5; average earnings per week, male, \$15; female, \$8; average earnings per hour, male, 25c.; female, 15c.; number of working hours first five days, 45; number on Saturday, 9; wages paid fortnightly; average number of days idle per member during year, 12; general cause of idleness, vacation and sickness; none from lack of work; total number (union and non-union) employed at trade in locality, male, 9; female, 8; no difference in wages or hours between members and non-members; cash benefits, sickness, \$5 per week; death, \$100; body incorporated and registered. President, Joseph Cross, Woodstock; Corresponding Secretary, R. N. Heppenstock, Box 605, Woodstock; meets 3rd Tuesday in month.

SUGGESTIONS FROM LABOUR ORGANIZATIONS.

No. 23.—We consider the institution of the 8-hour day in all Government work, whether done by day or contract, absolutely necessary, to show the possibility of such arrangement being practicable. Also the institution of a Government examination, when certificates of merit could be obtained in such subjects as building construction, building inspector, sanitary engineer, etc.

No. 24.—We would like to have women and girls kept out of the foundry, weekly pay days, shop heated by steam or hot air. Also fans to take the gas and smoke out of the shop, bath rooms, and a place to change our wet clothes. All passages kept clean at the time of casting.

No. 37.—We believe that if more attention were paid by the Factory Inspectors to the ventilation of foundries it would be very beneficial to our trade.

No. 48.—We are firmly under the impression that if we were to have a license system and Board of Examiners similar to some of the States, it would greatly improve the barbering trade.

No. 82.—We believe a license law would be a benefit to barbers and also a protection to the public.

No. 84.—To enforce the Act re protection of men employed on buildings, to appoint more building inspectors, and they to insist on better class of work, and who would inspect. The enforcement of the erection of out-houses for the accommodation of men employed whilst any building or buildings are under construction, more especially in cities, towns or villages.

No. 151.—Sanitary inspection of the homes where clothing is made in clothing centres.

No. 159.—From the fact that the duties of an Agent and Telegrapher are numerous, the hours of service twelve or more per day the year round (Sundays included), legislation prohibiting railway corporations working their employees connected with the movements of trains more than eight hours per day with one day off in seven for rest, would, no doubt, tend to greatly lessen the possibilities of accident. If the real truth was known, half the serious railroad accidents are caused through

employees being overworked. An eight-hour day law, with one day rest in seven, would be a God-send to the employees in railway service, as well as a safety-valve for the travelling public.

No. 167. We would suggest: (a) The enactment of an eight hour law relative to all public works, contract or otherwise. (b) The insertion in all Provincial contracts of a fair wage clause similar to that in Dominion contracts. (c) The adoption of a Compensation Act along the lines of the one in force in Alberta.

No. 168.—Our organization would like to establish a municipal license law to control plants not already covered by the **Ontario License Law**.

No. 194.—Certain chemicals and acids are now used by Photo-Engravers which are exceedingly dangerous to the health of the people employed. In England the Workmen's Compensation Act recognizes these and compensates accordingly. Attention should be paid to the proper ventilation and cleansing of workshops, etc., in order to minimize the danger of inoculation with lead, cyanide, metal and other poisons.

No. 197.—A general eight-hour day and four hours on Saturday would be acceptable by the plumbers and allied trades.

No. 220.—A great deal of good would be done if a little more care was exercised in the case of fresh arrivals in the building trades in not sending them into already overcrowded cities.

No. 223.—Our union are strongly in favour of the Ontario Government making an eight-hour day law in all the building trades, whether Government work or not.

No. 228.—We would like to have a nine-hour day and strict enforcing of the emigration laws.

No. 232.—Technical classes are badly needed.

No. 247.—All Government work, whether contract or day work, be governed by union scale of wages and hours, according to rules of union nearest place or places where said work is going on, and that all work be under competent inspection of the trades pertaining to said work.

No. 256.—We would like to see practical machinists placed as factory inspectors, and that present factory inspection be more thorough.

No. 272.—We believe that there should be a compulsory weekly, or, at the outside, fortnightly payment of wages, we being of the opinion that the loss of interest (bank or otherwise) sustained by the workmen, both by the monthly pay and the keeping back of ten to fifteen days in hand, which is the practice in this district, is most unfair. This Local is also strenuously opposed to the withholding of 50 cents per month for the maintenance of a so-called "Voluntary Relief Accident Fund," we being of the opinion that each workman should be first consulted as to his willingness, as stoppage is no payment. There have been cases (and one as recently as a week ago) where men have objected, and have been promptly dismissed. The question as to whether or not the men get full value in benefits, we consider, has no bearing on the subject. We only ask the right to decide that for ourselves, and for a workman to please himself whether or not this 50 cents a month shall be stopped from his pay.

No. 293.—We think it would be a good thing if the authorities have the power to inspect the smith's shops of this city, and see if they could not do something towards giving us better conditions by the law. There are foul gases coming off the fires and most shops have no ways or means by which to let these gases out, and they are a detriment to our health.

No. 310.—The poor consideration the carpenter receives in Toronto causes many of our good mechanics to migrate to other parts of the province, and also tends to make too many small boss builders, who are outbidding them on a number of contracts, neither good for the men or substantial firms, except real estate speculators.

No. 314.—We wish fewer rules and less clerical work, so that a conductor would have more time to see that his train orders were fulfilled.

No. 324.—We would suggest that a bill be brought before Parliament which would provide that no engineman be allowed to work more than 16 hours at any one time without a period of rest, as such long hours of duty endanger the life of enginemen as well as the public.

No. 328.—What is urgently needed to benefit the granite industry is a higher duty on finished granite, the low rate of wages in Scotland and low freight rates on steamship lines make it difficult for the Canadian manufacturer to compete with the product of the Scotch manufacturer.

No. 331.—Machinists are very poorly paid considering the skill required in their craft, amount of expensive tools required, and the expensive cost of living.

No. 336.—We believe in proper inspection of all foundries, and that special legislation regarding the ventilation and sanitary conditions of all sections of the foundry should be enacted. Female labour should be abolished from the core departments, and all passageways in foundries should be kept clear during the hours of casting.

No. 337.—We, as an organization, would like you to use your influence in securing an examination for moving picture operators, also a stricter inspection of operators and booths.

No. 339.—We would like to see legislation for the appointment of a fair wage officer, to compel contractors to comply with wage clause in their contracts, and a compulsory 8-hour day, with provision for overtime collectable in law. A law to compel the removal of old paper on walls or ceilings, or kalsomine, as a sanitary measure, to help to stamp out disease, giving any M.D. the power to affix a disfiguring stamp on any room that has been, or is being, used by a patient, and to report to the Health Board all such cases.

No. 344.—It would be of great benefit to the Plasterers' Labourers if a law was passed compelling employers to pay wages weekly instead of fortnightly, as it would enable men to do without having to ask credit for necessities, and also save cases of trouble which arise through employers not having money to pay their men with.

No. 345.—We would like to see an Act for the regulating of plumbing throughout the Province, the appointment of a Board of Examiners, and the registration of plumbers, employer and employee.

No. 353.—Owing to the large number of accidents caused to our men and to the public, we would like to see abolished side steps on open summer cars. A conductor was killed last season, and many other accidents occurred to the public far too numerous to mention.

No. 369.—We would like to see strict scaffold by-laws, compulsory 8-hour day, extended compensation Act.

No. 371.—We would like to see better sanitary conditions in foundries.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Allandale: Order of Railway Conductors, No. 355	A. Riddell	Bradford St., Barrie ..	F. Heart	Box 35	3rd Sunday, 2.30 p.m.
Brotherhood of Locomotive Engineers, No. 486	A. Wilkinson	Box 24, Allandale	John Lowe	Box 24	1st and 3rd Monday.
Brotherhood of Locomotive Firemen and Enginemen, No. 442	E. S. Kohtmeyer.	Allandale	Wm. Madge	Box 105	2nd and 4th Sunday.
Amherstburg: Brotherhood of Steam Shovel and Dredgemen, No. 20 ...	D. J. Haban	Amherstburg	J. J. Ryan	Box 136	To be decided by ex- officers.
International Association of Rock Drillers	Robt. Kitt	Amherstburg	Lemuel A. Parker	Amherstburg	2nd and 4th Sunday.
Belleville: Brotherhood of Locomotive Engineers, No. 189	T. H. Marshall ..	Belleville Station	H. Lavoie	Belleville	1st and 3rd Sunday, 2.30 p.m.
Brotherhood of Locomotive Firemen and Enginemen, No. 66	Alf. Calcutt	Belleville Station	Robt. J. Milne ..	Belleville Station	2nd and 4th Sunday.
International Brotherhood of Painters and Decorators ..	Thos. Waymark..	Herkimer Ave., Belle- ville	Alonze Geo. Coe.	Mill St.	1st and 3rd Monday.
Bricklayers' and Masons' Union, No. 30	David Mather ...	66 Charon St., Berlin.	Peter Jacobs	106 Wellington St.,	1st and 3rd Friday.
Berlin: United Brotherhood of Car- penters and Joiners, No. 553	John Nicholas..	110 Wellington St., Berlin	Arth. Plummer..	108 Weber St., E.	Every Friday.
Bricklayers' and Masons' Union, No. 12	Leo. Sobisch ...	Waterloo	Steve Wellheuser	Troy St.	2nd Wednesday.
Cigarmakers' International Union, No. 422	Emmanuel Bentz .	Berlin	Geo. Hofmann ..	53 Homewood Av.,	1st and 3rd Wednesday.
Hodcarriers' Union, No. 160.	E. C. Schultz ...	26 Brubacher St., Ber- lin	G. A. Albrecht ...	149 Wellington St.,	1st Tuesday.
Musicians' Protective Associa- tion	Fred. Ackernecht	Frederick St., Berlin .	Otto H. Zimmer .	17 Cameron St.	1st and 3rd Thursday.
Federal Union, No. 17	George Filsinger.	79 Ahrens St., Berlin.	Anna Wuest	109 College St.	1st Tuesday.
Journymen Tailors' Union, No. 264					

Boot and Shoe Workers' Union, No. 206	Chas. Hicker, Jr.	233 Waterloo St., Berlin	H. W. Oliver	130 Louisa St.	2nd and 4th Friday. 2nd and 4th Wednesday
United Brewery Workers' No. 170	W. Massel	Waterloo	A. E. Shantz	21 Elgin St.	
Blenheim:					
International Maintenance of Way Employees, No. 502 ..	A. Mansell	Blenheim P.O.	Stephen Tilley ..	48 Park Av., Chatham	At call of President.
Brantford:					
Bartenders' International League, No. 182	F. C. Halberstadt ..	King's Hotel, Market Place	Thos. McCusker ..	Bodega Tavern	Last Sunday of Month, at 3 p.m.
Bricklayers' and Masons' International Union, No. 9 ..	A. E. Brooks ..	70 Richmond Street, Brantford	B. E. Pearcy	74½ Erie Av.	Alt. Thursdays, from Jan. 12.
United Brotherhood of Carpenters and Joiners, No. 498	Charles Simmons ..	331 Reardon St., Brantford	Joseph Swift	292 Park Av.	2nd and 4th Tuesday.
Amalgamated Society of Carpenters and Joiners, No. 783			James C. Coles ..	238 Park Av.	Alternate Mondays.
International Moulders' Union, No. 29	Arthur Tooke ..	Dundas St., Brantford ..	C. J. Crowley ..	471 Colborne St.	Monday.
American Federation Semiprofessional Musicians, No. 467	Edward Lavery ..	.....			
Journymen Plumbers, Gas and Steam Fitters, No. 186.	W. McHutchison ..	37 Ontario St., Brantford	F. Willoughby ..	50 King St.	2nd Wednesday.
Journymen Tailors' Union of America, No. 117	A. Squibb	100 William St., Brantford	J. W. Croucher ..	51 Church St.	1st and 3rd Tuesday.
	Wilfred Jewell ..	129 William St., Brantford			
Barbers' Union, No. 298	James Rice	5 George St., Brantford ..	R. J. Campbell ..	162 Darling St.	4th Tuesday.
Typographical Union, No. 378	D. W. Reeves ..	109 Terrace Hill St., Brantford	Thomas Linscott ..	248 Colborne St.	Last Monday in month.
International Printing Pressmen and Assistants, No. 124	R. T. McClintic ..	99 Terrace Hill St., Brantford	I. D. Scruton ..	112 Sydenham St., ...	3rd Saturday.
Operative Plasterers' International Union, No. 164	R. G. Gildlestone ..	Northumberland Street, Brantford	R. T. McClintic ..	.....	.....
Bridgeburg:					
Car Repairers Union			C. A. Potter	93 Cayuga St.	2nd and last Thursday.
Brotherhood of Locomotive Engineers, No. 697	Richard Walsh ..	1892 Vinegar St., Buffalo, N.Y.	A. Merryweather ..	Bridgeburg, Ont. ....	.....
			M. R. Harvey ..	Bridgeburg, Ont.	1st Wednesday and 3rd Tuesday.
Brockville:					
Journymen Barbers' International Union, No. 387	A. W. Baxter ..	33 King St. W., Brockville	F. J. Clutterbuck ..	Box 629	Last Monday in month.
Brotherhood of Locomotive Engineers, No. 118	E. Mortimer	38 Charles St., Brockville	Robt. Wardrop ..	39 Daniel St.	Tuesdays.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Brockville.— <i>Con.</i> Brotherhood of Locomotive Firemen and Enginemen, No. 69	C. W. Buell	Brockville, Ont.	W. J. Dowell ...	22 E. James St.	Tuesday, at 3.30 p.m.
International Moulders' Union, No. 329	Robert Cleland ..	Abbott St., Brockville	Jas. P. Gordon ..	Box 150	1st and 3rd Tuesday.
Journymen Tailors' Union, No. 262	Chas. A. Cato ...	Garden St., Brockville	Miss M. Hodge ..	Hamilton St.	1st Monday.
Carleton Place: Machinists Helpers and Labourers (F.L.U.) No. 12892.	George Phillips ..	Carleton Place, Ont.	John M. Burrows ..	Box 178, Carleton Place	3rd Thursday.
International Moulders' Union, No. 362	John McPhail ..	Box 292, Carleton Place	J. J. Carson	Box 292, Carleton Place	3rd Thursday.
International Brotherhood of Maintenance of Ways Employees, No. 222	James Millikin ..	Carleton Place	I. P. Steeles	Box 313, Carleton Place	Last Saturday.
Chapleau: Brotherhood of Locomotive Engineers, No. 319	James Rose	Chapleau, Ont.	B. Warner	Box 158	Every Monday at 2 p.m.
Brotherhood of Locomotive Firemen and Enginemen, No. 321	P. Buncombe ...	Chapleau, Ont.	S. Kruger	Chapleau	Every Wednesday.
International Association of Machinists, No. 535 .....	.....	.....	V. Beardmore ..	Box 57	2nd and 4th Wednesday
Brotherhood of Railway Trainmen, No. 246	W. McMullen ...	Chapleau, Ont.	A. Wilson	Chapleau, Ont.	Every Thursday at 2.30 p.m.
Chatham: United Garment Workers of America, No. 44	Mrs. W. J. Bertram	270 Wellington Street, Chatham	Edith Kennedy ..	Chatham, Ont.	Tuesday in each month.
International Typographical Union, No. 421	W. A. McWhirter	124 Selkirk St., Chatham	Thomas W. Clark ..	91 Prince St.	1st Saturday.
Collingwood: Journymen Barbers' International Union, No. 528	Leonard Fryer ..	Huron St., Collingwood	Fred Bollen	Box 536	1st and 3rd Monday.
International Longshoremen's Association, No. 476	W. Nutt	Ste. Marie St., Collingwood	E. Johnston	Beech St.	1st and 3rd Thursday.

Bricklayers' and Masons' Union, No. 19	John Gilham ...	Box 777, Collingwood ..	Willis Court	Box 797	3rd Wednesday.
International Association of Machinists, No. 627 ..	M. Fryer	Box 585, Collingwood ..	Allan Ramsay ..	Collingwood	2nd and 4th Wednesday.
International Union of Steam Engineers, No. 321	John Bannan ..	Collingwood	E. J. Mallen	Collingwood	Monday.
Cornwall:					
Journeyman Tailors' Union of America, No. 355	T. Delbeck	First St., Cornwall ..	C. T. Stafford ...	Box 390	1st Monday.
Deseronto:					
Order of Railway Telegraphers, Division No. 43					
Dundas:					
International Moulders' Union, No. 269	George S. Stutt..	Box 239, Dundas	W. Watts	Box 315, Dundas ..	3rd Monday.
Elmira:					
Amalgamated Wood Workers of America, No. 129	Thos. Dillon	Elmira	S. B. Frey	Park Ave.	
Essex:					
International Brotherhood of Maintenance of Ways Employees, No. 312	A. B. Lowe	3900 Olive St., St. Louis, Mo.	Samuel J. Pegg ..	3900 Olive Street, St. Louis, Mo.	2nd and 4th Wednesday
Fort William:					
International Brotherhood of Boilermakers, Ship Builders, etc., No. 505	Fredk. Stafford..	420 Mary St., Fort William	W. Morris	335 Ogden St.	1st and 3rd Saturday.
Bricklayers' and Masons' International Union, No. 25 (Ont.)	Stephen Hartley.	24 Shuniah Rd., Port Arthur	Arthur Scarlett ..	Box 458, Port Arthur ..	2nd and 4th Monday.
Amalgamated Society of Carpenters and Joiners, No. 787 ..	D. McCallum ...	Box 287, Fort William ..	H. Edwards	134 S. Franklin St. ...	1st and 3rd Monday.
International Longshoremen's Association (Coal Handlers), No. 746	Nicolas Domenico	Fort William	G. E. Boss	114 Heron St.	At call of President.
International Longshoremen, (Grain Trimmers), No. 479 ..	S. Hall	19 Ontario St., Port Arthur	John Laurie	131 St. John St.	1st Wednesday.
Order of Railway Conductors, Div. No. 286	D. H. Beaton ...	346 N. Syndicate, Fort William	A. B. Marcotte ..	439 Wiley St.	2nd and 4th Sunday.
Brotherhood of Locomotive Engineers, No. 243	W. S. Stone	Fort William	W. G. Smyth ...	407 Prince Arthur Bldg.	1st and 3rd Monday.
International Association of Bridge and Structural Iron Workers, No. 53	William Higgins.	423 S. Archibald St., Fort William	Frank Souch ...	345 S. Vickers St.	1st and 3rd Friday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Fort William.— <i>Con.</i>					
International Moulders' Union, No. 429	John Dick	Cor. Catharine & William Sts., F. William Victoria Ave., Fort William	F. Christianson ..	34 Rutlan Street, Port Arthur	4th Saturday.
Plumbers, Gas Fitters, Steam Fitters, etc., No.	Martin Higgins ..	Victoria Ave., Fort William	Harry Allen	S. Mark St.	Every 2nd Thursday.
Galt:					
Journymen Barbers' International Union, No. 413	Wesley J. Fettes ..	Main Street, Galt	Bert B. James ..	6 S. Water St.	Last Thursday in month.
Boot and Shoe Workers' International Union, No. 330 ..	Adam Wilson	Box 623, Galt	S. Edwin Smith..	Box 593	Every 2nd Thursday.
Amalgamated Society of Engineers, Branch No. 666...	William Oxtoby..	Galt	Samuel Schofield	Box 1103	Alternate Wednesdays.
International Association of Machinists, No. 120	A. D. Fulton	Box 772, Galt	J. E. Fulton	Box 772	2nd Monday.
International Moulders' Union, No. 447	Jos. E. Kent	Galt	David Melvin ..	Box 356	1st and 3rd Thursday.
International Typographical Union, No. 411	Frank Donchell..	Box 391, Galt	Arthur L. Phelps.	251 E. Main St.	1st Tuesday.
Guelph:					
Journymen Barbers' International Union, No. 310	Frank Corrigan ..	55 Cork St., Guelph ..	Jos. Egan	77 Quebec St.	Last Monday.
Bartenders' International League, No. 104	W. Mulroney	12 Pearl St., Guelph ..	Robert McCaw ..	59 Norfolk St.	1st Friday.
Bricklayers' and Masons' Union, No. 3	E. Simpson	George St., Guelph ..	H. L. Benallick ..	77 Hearn Ave.	2nd and 4th Thursday.
United Brewery Workers' of America, No. 300	A. Gruzleski.....	68 Edinburgh Road, Guelph	W. Golding	73 Perth St.	1st Thursday.
International Moulders' Union, No. 212	H. Leadlay	24 Oliver St., Guelph ..	F. W. Felker	114 Northumberland St.	1st and 3rd Friday.
Brotherhood of Painters, Decorators and Paperhangers, No. 837	George Dudley ..	27 Anne St., Guelph ..	H. Smith	105 Quebec St.	1st and 3rd Tuesday.
Piano and Organ Workers' No. 34	James Brohman..	Kent St., Guelph	Geo. Cutting	127 Palsley St.	3rd Thursday.
International Typographical Union, No. 39	R. T. Knight	578 Woolwich St., Guelph	C. E. Sarney	76 Preston St.	2nd Monday.

Hamilton:					
Journymen Barbers' International Union, No. 131	W. McEald	107 James St., Hamilton	H. J. Halford	59 John St.	1st and 3rd Monday.
Barbers' League, No. 197	Geo. Hibberd	123 James St., Hamilton	John Farr	24 Barton St.	1st and 3rd Sunday.
International Union Bricklayers' Masons' etc., No. 1	John Seamen	West Ave., Hamilton	John T. Laing	164 Robinson St.	Every Thursday.
International Brotherhood of Bookbinders, No. 114	John Glockling	1 Jones St., Hamilton	W. E. Monk	120 Lock St.	Last Friday.
Boot and Shoe Workers' International Union, No. 444	W. Harford	206 Market St., Hamilton	W. H. Hamilton	180 George St.	2nd Friday.
Boot and Shoe Workers' International Union, No. 234	Miss N. Sherriif	Y W.C.A. Bldg., Main St., Hamilton	E. Copeland	132 Markhand St.	4th Thursday.
Boot and Shoe Workers' International Union, No. 228	Joseph Gimblett	73 Oxford St., Hamilton	H. A. Harrison	43 Melbourne St.	3rd Tuesday.
Boot and Shoe Workers' International Union, No. 232	P. J. Kennedy	John St., Hamilton	E. Peters	119 Peter St.	4th Friday.
Broom and Whisk Workers' International Union, No. 9	James Petfield	75 Hunter St., Hamilton	W. H. McAdam	70 Catharine St.	2nd Monday.
Amalgamated Society of Carpenters and Joiners, No. 785	Archie Burton	46 Garfield Ave., Hamilton	F. H. Smith	18 Ardvorlich St.	Alternate Monday.
United Brotherhood of Carpenters and Joiners, No. 13	Albert Blythe	49 Wellington Street, Hamilton	H. I. Sparks	9 Delaware Ave.	1st and 3rd Tuesday.
International Cigarmakers' Union, No. 55	C. J. Meader	11 McNeil St., Hamilton	F. Hough	170 Duke St.	2nd Tuesday.
Order of Railway Conductors, No. 27	E. C. Shepherd	8 Locke St., Hamilton	A. Cameron	297 York St.	1st and 3rd Sunday.
Amalgamated Society of Engineers, No. 646	S. Clarke	64 Frances St., Hamilton	R. C. Paterson	187 Napier St.	Alternate Friday.
Brotherhood of Locomotive Engineers, No. 133	W. S. Stone	B. of L. E. Building, Cleveland, Ohio	A. A. Griffith	81 Murray St.	2nd and 4th Sunday.
Canadian Association Stationary Engineers, No. 2	W. Lamberton	Park & Mulberry Sts., Hamilton	A. W. Heath	111 Burns St.	2nd and 4th Thursday.
Federal Labour Union (City Firemen), No. 11	D. L. McCarthy	Park St., Hamilton	Jas. C. Holtrum	251 Wellington St.	1st Monday.
Journymen Horseshoers' Union, No. 72	W. R. Allen	132 Caroline St., Hamilton	Albert Decker	83 Smith Ave.	2nd Wednesday.
International Moulders' Union of N. A., No. 26	Henry Bourne	54 Ferrie St., Hamilton	Jas. W. Ripley	159 Mary St.	Every Wednesday.
Musicians' Protective Association, No. 93	A. J. Milligan	81 Picton St., Hamilton	Jos. Gimblett	73 Oxford St.	2nd Sunday.
Brotherhood of Painters, Decorators and Paperhangers, No. 205	E. Parrson	8 Adams St., Hamilton	F. J. Dunger	362½ Bay St.	1st and 3rd Monday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—*Continued.*

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Hamilton.— <i>Con.</i>					
Patternmakers' League of North America	Chas. Young	191 East Ave., Hamilton	John Harrower	40 St. Matthews Ave.	1st and 3rd Thursday.
Amalgamated Association of Sheet Metal Workers', No. 61	H. Sheppard	72 Robert St., Hamilton	Geo. E. Farr	Hamilton Beach P.O.	1st and 3rd Friday.
International Alliance of Stage Employees, No. 129 ..	Thomas McNab	158 Barton St., Hamilton ..	George Elville	405 Bay St.	4th Monday.
Journymen Stonecutters' Association	Thos. Harrison	Wood St., Hamilton ..	George Campbell	28 Fairleigh Ave.	2nd and 4th Thursday.
Stove Mounters' International Union, No. 35	Albert Reid	33 Spring St., Hamilton ..	Thos. Bevers	35 Tisdale St.	1st Monday.
Amalgamated Association of Street and Electrical Railway Employees, No. 107 ..	George Cairns	140 Wentworth Street, Hamilton	H. R. Oakes	287 Wellington St.	1st and 3rd Saturday.
Tobacco Workers' International Union, No. 48	Thos. Finnigin	128 Cannon St. Hamilton ..	A. H. Broughten	22 Hunt St.	2nd and 4th Monday.
Brotherhood of Railway Trainmen, No. 226	H. J. Penton	80 Poulette St., Hamilton ..	R. L. Almas	22 Baillie St.	2nd and last Sunday.
International Typographical Union, No. 129	J. T. Bonner	"Herald" Office, Hamilton	J. J. Burns	115 E. Murray St.	2nd Wednesday.
Wood, Wire and Metal Lathers' Union, No. 145	James Bryer	Melbourne St., Hamilton ..	James Gilchrist	100 Merrick St.	2nd and 4th Wednesday.
Havelock: Brotherhood of Locomotive Engineers, No. 658	T. Hartney	Havelock, P.O.	John Toman	Havelock P.O.	2nd and 4th Monday.
Brotherhood of Railway Trainmen, No. 293	J. J. Carter	Havelock	J. S. McWhorter	Smith's Falls	2nd and 4th Thursday.
Ingersoll: International Brotherhood of Maintenance of Ways Employees, No. 503	M. Sprague	Ingersoll	D. McCord	Belmont	At call of President.
Jack Fish: International Brotherhood of Maintenance of Ways Employees, No.—	J. Lerwill	Heron Bay	A. Bianconi	Jack Fish	Last Saturday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Lindsay.— <i>Con.</i> Brotherhood of Locomotive Trainmen, No. 308	S. Halpin	Box 528, Lindsay	A. R. McKay ...	Box 528	2nd and 4th Sunday.
Bartenders' International League, No. 137	George Parker ..	London House, London ..	H. G. Edsall	58 Colborne St.	2nd and 4th Sunday.
International Alliance of Bill Posters, No. 22	William Cooney ..	Queen's Ave., London ..	Chas. L. Vincent.	673 Lorne Ave.	2nd Sunday.
International Union of Boiler Makers, Iron Ship Build- ers, No. 203	W. Stinson	895 Elias St., London ..	Harry Nibbler ..	811 Central Ave.	2nd and 4th Wednesday.
Boot and Shoe Workers' In- ternational Union, No. 88.	S. Gollant	c/o Cook, Fitzgerald Shoe Co., London ..	Edgar V. Lucas ..	409 Ridout St.	2nd and 4th Thursday.
Bricklayers' and Masons' International Union, No. 5.	C. E. Holliday ..	130 Clarence St., Lon- don	Frank C. Pierce.	687 Princess Ave.	2nd and 4th Wednesday.
Amalgamated Society of Car- penters and Joiners, No. 783	A. Ellis	20 Alexander St., Lon- don	John Tanton ...	379 Waterloo St.	2nd and 4th Wednesday.
United Brotherhood of Car- penters and Joiners, No. 1946	R. Pring	702 Maitland St., Lon- don	W. Mitchell	1055½ Dundas St.	1st Monday.
Cigarmakers' International Union, No. 278	Tim. Delaney ...	Waterloo St., London ..	W. Heslop	93 Albion St.	1st and 3rd Tuesday.
Amalgamated Society of En- gineers, No. 577	Alex. McDonald..	867 Waterloo St., Lon- don	Geo. H. Scollick ..	583 Grey St.	2nd Friday.
Brotherhood of Locomotive Engineers, No. 68	James Porteous..	374 York St., London ..	John Gurney ...	125 Inkerman St. ....	.....
Canadian Association of Sta- tionary Engineers, No. 30.	Geo. Fowler	Gregg House, London ..	J. R. Stephenson	37 Egerton St.	2nd and 4th Tuesday.
Brotherhood of Locomotive Firemen and Engineers, No. 468	Geo. H. Trace ..	220 Burwell St., Lon- don	Chas. Phipps ...	626 Lorne Ave.	2nd and 4th Tuesday.
United Garment Workers' of America, No. 33	Miss M. McDonald	169 John St., London ..	A. H. Carroll ...	204 Lydenham St.	4th Friday.
International Association of Granite Cutters of America	W. Cunningham.	145 Clarence St., Lon- don .....	.....	.....	.....

International Brotherhood of Maintenance of Ways Employees, No. 195	D. Stallard	830 Elias St., London	D. H. Walsh	381 Central Ave.	Last Saturday
American Federation of Musicians, No. 279	H. Woostie	210 Wharncliffe Rd., London	C. N. Perrin	352 Adelaide St.	4th Sunday.
United Association of Plumbers, Gas and Steam Fitters, No. 289	J. Mitchell	Richmond St., London	Geo. F. Avery	189 Waterloo St.	1st and 3rd Tuesday.
Printing Pressmen and Assistants' International Union, No. 173	George Flory	256 Grosvenor St., London	H. Smith	642 Marshal St.	1st Saturday.
Brotherhood of Railway Trainmen, No. 240	J. Dey	892 Queen's Ave., London	W. Harris	29 Victor St.	1st and 3rd Sunday.
Brotherhood of Railway Trainmen, No. 415	Peter Kelleher	51 Palace St., London	W. H. Nichol	896 Princess Ave.	2nd and 4th Sunday.
Federated Association of Letter Carriers, No. 4	C. Fitzgerald	161 Princess Ave., London	W. M. Empey	573 Oxford St.	1st Tuesday.
International Alliance Theatrical Stage Employees, No. 105	W. J. Newman	Wilson Ave., London	R. E. Whitton	135 Albert St.	1st and 3rd Sunday.
International Typographical Union, No. 133	A. C. Flowers	Cor. William and Pall Mall Sts., London	W. O. Ruse	14 Walnut St.	1st Saturday.
International Brotherhood of Electrical Workers' Journeymen Barbers' International Union, No. 366	E. Inglis	85 Clarence St., London	C. Thayer	787 Lorne Ave.	2nd and 4th Thursday.
Order of Railway Telegraphers, No. 1	John Frezell	617 Dundas St., London	J. E. Secker	713 Richmond St.	4th Monday.
Order of Railway Telegraphers, No. 7	B. J. Rowell	158 Fairfield St., Woodford Station, Me	D. L. Shaw	427 William St.	At call of President.
United Brewery Workers' No. 381	A. E. Chapman	265 Piccadilly St., London	G. Elliott	368 Dundas St.	3rd Saturday.
Midland: International Longshoremen's Association, No. 19	R. H. Annett	St. Patrick St., London	Arthur Jackson	11 St. Patrick St.	2nd Thursday.
Milverton: International Brotherhood of Maintenance of Ways Employees, No. 163	George McMullen	Midland	D. A. Hall	Midland	1st and 3rd Tuesday.
Niagara Falls: Amalgamated Society of Carpenters and Joiners, No. 793	T. A. Netterfield	West Monkton	J. J. Elliott	Milverton	1st Friday.
	W. H. Leake	629 Elmwood Ave., Niagara Falls, N.Y. ...	W. Broomhall	45 McGrail Ave.	Alternate Fridays.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Niagara Falls.— <i>Con.</i> United Brotherhood of Car- penters and Joiners, No. 713	William Faurst.	Park St., Niagara Falls	Tom Moore	Box 419	Every Wednesday.
International Union of Steam Engineers, No. 232	J. A. McPherson.	Alexandra House, Ferry Road, Niagara Falls.	Geo. Asetline	55 Lundy's Lane	2nd and 4th Friday.
Journeyman Stonecutters As- sociation of North America	Jas. Gousell	Thorold	E. Garnell	62 Morrison St.	4th Monday.
Brotherhood of Railway	Jas. Collins	Bridge St., Niagara Falls	A. E. Savage	26 St. Lawrence St.	1st and 4th Tuesday.
Trainmen, No. 379					
North Bay: Brotherhood of Railway Car- men of America, No. 192	L. W. Wilson	North Bay, Post Office.	R. Rowe	North Bay P.O.	4th Friday.
Order of Railway Conductors, No. 242	Chas. Harrison	North Bay	A. Brown	Box 161	2nd and 4th Monday.
Brotherhood of Locomotive Engineers, No. 308	W. Hallandal	North Bay	T. W. Turner	183 McIntyre St. W.	1st and 3rd Monday, at 2 p.m.
International Brotherhood of Maintenance of Ways Em- ployees, No. 244	A. E. Partushek.	Warren, Ont.	D. C. Wilson	Mattawa	Last Saturday.
Order of Railway Telegraph- ers, No. 99	J. J. Campbell	North Bay	R. Workman	Box 969	At call of President.
Brotherhood of Railway Trainmen, No. 249	W. G. Lee.	American Trust Bldg., Cleveland, Ohio	J. W. Barker	Box 535	2nd and 4th Thursday.
Orangeville: International Brotherhood of Maintenance of Ways Em- ployees, No. 214	R. B. McIntosh	Owen Sound	D. McDougall	Fergus	Last Saturday in Mar., June, Sept., and Dec.
Oshawa: United Brotherhood of Car- penters and Joiners, No. 1279	John Walker	Oshawa	W. J. Fry	Oshawa	2nd and 4th Wednesday.
Iron Moulders' Union of North America, No. 136	A. Robinson	Oshawa	R. H. Rogan	Box 512	3rd Thursday.
Pattern Makers League of North America	Norman Stewart.	South Oshawa P.O.	John Butchart	Box 643	3rd Thursday.

Ottawa: Bricklayers' Union, No. 7 .. Bricklayers', Masons', and Plasterers' International Union, No. 14	Richard Reardon 89 Lloyd St., Ottawa ..	Alex. Findlay, Jr. 313 Sunnyside Ave. ...	2nd Monday.
Amalgamated Society of Car- penters and Joiners, No. 794 United Brotherhood of Car- penters and Joiners, No. 93 Order of Railway Conductors, No. 29	John Cameron .. 74 Lloyd St., Ottawa .. Joseph Wardroff .. 278 Bay St., Ottawa .. Louis Bloum 275 Breeze Hill Avenue, Ottawa	M. Fleury 214 Patterson Ave. ... Peter McAnish .. 105 Third Ave.	Alternate Mondays. 1st and 3rd Thursday.
Brotherhood of Locomotive Engineers, No. 168	J. Marsh 191 Pretoria Ave., Ot- tawa	Emery Belairs .. 267 Clarence St.	2nd and 3rd Wednesday.
Brotherhood of Locomotive Engineers and Firemen, No. 172	E. D. Towsley .. 161 Nepean St., Ottawa .. H. E. White 15 Spadina Ave., Ot- tawa	J. B. Morris ... 305 Bronson Ave. J. P. Chisholm.. 35 Left St.	2nd and 4th Sunday. 2nd and 4th Sunday.
Federal Union (Gas Stokers) No. 9	J. McKibban 500 McLeod St., Ottawa ..	T. A. Smyth ... 39 Maple St. J. Read 339 King Edward Ave.	2nd and 4th Friday. Tuesdays and Fridays.
International Hodcarriers' and Builders' Labourers' Union, No. 4	T. Howlett 15 Hill St., Ottawa ..	C. Plumb 310 Gladstone Ave. ...	2nd and 4th Tuesday.
International Association of Machinists, No. 412	B. E. Newman .. 65 Anderson St., Ot- tawa	H. E. Roche 75 Elm St.	2nd and 4th Friday.
International Moulders' Union, No. 280	W. McEwen 11 Louisa St., Ottawa ..	J. E. Bedard 155 Alma St., Hull, Que.	1st and 3rd Thursday.
Painters, Decorators and Paperhangers International Union, No. 200	A. Rudd 318 Sunnyside Ave., Ot- tawa	E. C. Brandt 57 Bayswater Ave.	1st and 3rd Wednesday.
International Brotherhood of Paper Makers, No. 34	Albert Biage	A. Hickman 28 Bridge St., Hull ..	2nd and 4th Sunday.
International Photo Engrav- ers Union, No. 44	E. B. Shore 262 Kent St., Ottawa.	Arthur Miles ... 108 Goulbourne Ave. .	1st Monday.
Operative Plasterers' Interna- tional Association, No. 124.	T. H. Jarvis 18 Fourth Ave., Ottawa	John Herdman . 181 Creighton St.	1st and 3rd Tuesday.
Plasterers' Labourers' Union No. 1	John Robertson . 70 Victoria St., Ottawa	A. Bethell Westboro' P.O.	2nd and 4th Thursday.
United Association of Plumb- ers and Steamfitters Union, No. 71	W. Kennedy	J. F. Reason Ottawa West	2nd and 4th Wednesday
International Pressfeeders' and Assistants' Union, No. 9	John Rooney Stuart St., Ottawa ...	O. Bureau 87 Ann St., Hull, Que.	2nd Monday.
International Printing Press- mans' Union, No. 5	W. E. Bell 2 Salisbury Place, Ot- tawa	A. J. Larden 327 Bell St.	3rd Friday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Ottawa.— <i>Con.</i>					
Commercial Union (Salesmen), No. 1	W. A. Brown ...	Henderson Ave., Ottawa	H. Leclerc	277 Clarence St.	1st and 2nd Monday.
Sheet Metal Workers' International Alliance, No. 47 ..	J. J. Murphy ...	475 Cooper St., Ottawa	J. M. Bond	123 Spruce St.	2nd and 4th Thursday.
International Alliance Theatrical Stage Employees, No. 95	R. R. Mareil ...	191 St. Andrew St., Ottawa	Donald Casey ..	52 Gloucester St.	1st Sunday.
International Union of Stereotypers' and Electrotypers', No. 50	Thomas Miller ..	Herridge St., Ottawa	W. R. Hague ...	139 Henderson Ave. ...	
Stonecutters' International Association	Walter Turner ..	116 Florence St., Ottawa	J. W. Thomson ..	274 Turner St.	2nd and 4th Friday.
Amalgamated Association of Street and Electric Railway Employees, No. 279	J. O'Brien	211 Slater St., Ottawa	J. O'Brien	211 Slater St.	1st and 3rd Friday.
Journymen Tailors' Union of America, No. 143	F. D. Walters ..	170 Nepean St., Ottawa	Chas Milne	510 $\frac{1}{4}$ Kent St.	1st and 3rd Monday.
Brotherhood of Railway Trainmen, No. 129	A. E. Salmon ..	48 Preston St., Ottawa	W. A. Perry	1 Elm St.	
Brotherhood of Railway Trainmen, No. 185	John Maloney ..	62 Henderson Ave., Ottawa	H. H. Brown	542 Lyon St.	Alternate Sundays.
Canadian Typographical Union, No. 1	W. C. Feague ...		J. H. Lanthier ..	649 Cumberland St. ...	2nd Saturday.
Owen Sound:					
Bricklayers' and Masons' International Union, No. 11.	C. Leathbridge ..	5th Avenue W., Owen Sound	Samuel Mather ..	East Hill	Every Thursday.
International Moulders' Union, No. 413	W. Farmer		W. O. Cornwith ..	1673 4th Avenue West.	1st and 3rd Tuesday.
Journymen Stonecutters' of North America	D. Fraser	357 5th Street, Owen Sound	E. Gaskell	1182 4th Avenue	1st and 3rd Friday.
Palmerston:					
Brotherhood of Locomotive Firemen and Enginemen, No. 181	D. G. Freeland ..	Palmerston	H. W. Ladd	Box O., 10	1st and 3rd Sunday...
Parry Sound:					
International Association of Machinists, No. 518	Joseph Smith ...	Parry Sound	George Heart	Parry Sound	1st and 3rd Wednesday.

International Brotherhood of Maintenance of Ways Employees, No. 447	John Carlton ...	Parry Harbour ...	C. Smith	Otter Lake Station ..	No regular meeting night. 2nd and 4th Sunday.
Brotherhood of Railway Trainmen, No. 759	W. Burke	Box 535, Parry Sound ..	S. G. Wilkinson.	Box 535	
Penetanguishene: Canadian Association of Masters and Mates, No. 4	Roy Burke	Penetanguishene	W. J. Martin ...	Penetanguishene	Saturday in winter; 1st Saturday in summer.
Peterborough: Journeymen Barbers' International Union, No. 402	Edward Kelly ..	Charlotte St., Peterborough	George Brousseau	140 Brock St.	3rd Monday.
United Brewery Workmen, No. 304	Robert Zingard ..	Peterborough	J. C. Godfrey ...	10 Hunter St.	1st Thursday.
Bricklayers' and Masons' International Union, No. 17	M. H. Dicks	Patterson Street, Peterborough	William Stevens.	Box 778	1st and 3rd Tuesday.
International Brotherhood of Maintenance of Ways Employees, No. 211	George Spicer ..	Peterborough	Geo. A. Lemmon.	Leaside Junction	At call of President.
International Moulders' Union, No. 191	Hugh Robertson.	567 Reid St., Peterboro	W. A. Mowry ...	457 Cedar St.	1st and 3rd Thursday.
Brotherhood of Painters, Decorators and Paperhangers, No. 379	T. Embury	344 Simcoe St., Peterborough	T. E. Hall	Cor. Woodbine-Erskine	1st and 3rd Monday.
Pattern Makers' League of North America	C. F. Browne ...	30 College St., Peterborough	J. A. Sharp	537 Homewood Ave. .	2nd and 4th Tuesday.
International Typographical Union, No. 248	E. Bartlett	216 London St., Peterborough	J. M. Galbraith ..	125 Brock St.	1st Saturday.
Porcupine: Western Federation of Miners, No. 145	Hugh Kincade ..	Drawer H., Porcupine.	J. D. Cluney	Drawer H.	Meets Sunday.
Prescott: International Longshoremen's Association, No. 244	E. Anderson	Prescott	W. J. Himes, Jr.	Water St.	Every Monday.
Preston: International Moulders' Union, No. 314	Chas. Kremer ..	Preston	T. J. Parker ...	Box 85	1st and 3rd Tuesday.
Port Arthur: Amalgamated Society of Carpenters and Joiners	A. Fraser	St. Vincent St., Port Arthur	S. Bell	176 Banning St.	1st and 3rd Monday.
United Brotherhood of Carpenters and Joiners, No. 285	W. J. Robertson.	392 John St., Port Arthur	A. F. Manchec ..	116 Jean St.	1st and 3rd Monday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—*Continued.*

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Port Arthur. <i>Con.</i>					
International Association of Machinists, No. 820	Ernest Sellers ..	244 Cameron St., Port Arthur	Andrew Boyd ..	368 Wiley St.	1st Wednesday.
United Association of Plumbers and Steamfitters, No. 378	L. McArthur	Prospect Ave., Port Arthur	C. J. Vincent ...	36 Algoma St.	2nd and 4th Friday.
International Alliance Amalgamated Sheet Metal Workers, No. 285	A. Wallace ..	1015 Miles St., Port Arthur	J. E. Murphy ...	43 Regent St.	4th Tuesday.
Journeymen Stonecutters' Association of North America.	Mike King	Carrick Add.	Robert Paton ..	Empire Ave., Carrick Add.	2nd and 4th Tuesday.
Port Hope:					
International Moulders' Union No. 189	Walter Thomas..	Box 341, Port Hope ..	Chas. McElroy ..	Box 201	1st and 3rd Monday.
Rainy River:					
Order of Railway Conductors, No. 30	A. B. Garretson..	Cedar Rapids	S. McElroy	Box 129	1st and 3rd Sunday.
Brotherhood of Locomotive Firemen and Enginemen, No. 750	A. L. Campbell..	Rainy River	A. E. Smith	Box 61	2nd and 4th Thursday.
Richmond Hill:					
Order of Railway Telegraphers	H. B. Perham...	St. Louis, Mo., U.S.A.	John Lucas	Richmond Hill	At call of President.
Ridgemoont:					
Order of Railway Telegraphers, No. 16	J. C. Culkins ..	Albion, Mich.	J. H. Staley	Ridgemoont	3rd Monday.
St. Catharines:					
Barbers' Union, No. 1	J. M. Bessey	St. Paul St., St. Catharines	Adam Haynes ..	293 St. Paul St.	1st and 3rd Monday.
International Brewery Workers' (united) Union, No. 305	George Wiley ..	5 Cherry St., St. Catharines	Robert Hall	4 Thomas St.	3rd Friday.
Bricklayers', Masons', and Plasterers' International Union, No. 4	R. N. Rymer	15 Dacotah St., St. Catharines	C. G. Patey	48 Louisa St.	1st and 3rd Tuesday.
Amalgamated Society of Carpenters and Joiners, No. 61	H. Atkinson	5 Geneva St., St. Catharines	James Atkinson.	5 Geneva St.	Alternate Thursday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
St. Thomas.— <i>Con.</i> Brotherhood of Railway Trainmen, No. 47	A. E. Hookway ..	638 Talbot Street, St. Thomas	Herbert Sharp ..	2 John St.	Every Monday.
International Typographical Union, No. 459	Lorne Calcott ..	c/o "Journal" Printing Co., St. Thomas ..	Robert Porter ..	8 Drake St.	2nd Monday.
Sarnia: Brotherhood of Railway Car- men, No. 295	W. Dagg	434 Russell St., Sarnia ..	W. F. Gibson ...	301 Russell St.	1st Monday.
Order of Railway Conductors, No. 187	J. W. Weston ..	127 Vidal St., Sarnia ..	H. Bell	288 Campbell St.	1st and 3rd Tuesday.
Brotherhood of Locomotive Engineers, No. 240	J. S. Crawford ..	111 N. Brock Street, Sarnia	J. Copeland	140 Savoy St.	Alternate Thursdays.
International Longshoremen's Association, No. 253 ..	Edwin Owen ..	117 Julia St., Sarnia ..	John Jackson ..	Sarnia	1st and 3rd Friday.
Brotherhood of Railway Trainmen, No. 227	J. McKeever ..	St. Clair Hotel, Sarnia ..	D. McEachan ...	125 Margaret St.	1st and 3rd Monday, 8 p.m.
Sault Ste. Marie: Brotherhood of Locomotive Engineers, No. 67	W. Cleminson ..	Steelton	A. C. Wagner ...	Box 27	2nd and 4th Monday, 2 p.m.
International Brotherhood of Maintenance of Ways Em- ployees, No. 7	W. S. Smith ..	Walford P.O.	W. McCarthy ...	Webbwood .....	.....
Journeymen Plumbers Union, No. 414	Hugh Paterson ..	Queen St., Sault Ste Marie	J. S. Dew	131 Treburn Ave.	2nd and 4th Thursday.
Iron Moulders' Union of North America, No. 391 ..	James Darrance ..	45 Grosvenor Ave., Sault Ste Marie ...	E. C. Wood	Moffly Sub. Div.	3rd Friday.
Silver Centre: Western Federation of Min- ers, No. 148	C. W. Thomas ..	Silver Centre	C. H. Lowthian ..	Silver Centre	Sunday, 2 p.m.
Schreiber: Brotherhood of Locomotive Firemen and Enginemen, No. 387	William Hughes ..	Schreiber P.O.	E. E. Cambridge ..	Box 173	1st Sunday, 2 p.m.; 3rd Wednesday, 8 p.m.
International Brotherhood of Maintenance of Ways Em- ployees, No. 260	Thos. Bosler	Schreiber	W. Sparks	Schreiber	Last Sunday.

Smith's Falls: Bricklayers', Masons', and Plasterers' Intern. Union, No. 21	W. H. Rathwell ..	Smith's Falls	A. Johnston	Box 231	2nd and 4th Wednesday.
Int. Brotherhood M. of Ways Employees, No. 136	F. Bragg	Avonmore	A. J. Seal	Perth	At call of President.
Brotherhood of Railway Train- men, No. 527	J. W. Thomas ..	Smith's Falls	A. M. Brown ..	Smith's Falls	1st Monday; 3rd Wed- nesday.
Stratford: Bricklayers', Masons', and Plasterers' Union, No. 24 ..	H. Shorn	Huron St., Stratford ..	W. L. Lewis	107 Milton St.	2nd and 4th Thursday.
Cigarmakers' International Union, No. 424	M. E. Whalen ...	102 Grange St., Strat- ford	Jas. Hagarty ...	179 St. David St.	1st Wednesday.
Order of Railway Conduc- tors, No. 15	D. S. McHaffie ..	23 Ontario St., Strat- ford	R. T. Buchanan ..	37 Milton St.	2nd and 4th Sunday.
Amalgamated Society of En- gineers, No. 579	Hugh Dickie	Burford St., Stratford ..	William Bell ...	216 Douro St.	2nd Saturday.
Brotherhood of Locomotive Engineers, No. 188	T. J. Dolan	75 Bay St., Stratford ..	John Battley ...	185 Douro St.	1st and 3rd Sunday.
Brotherhood of Locomotive Firemen and Enginemen, No. 38	Fred. Cosby	33 Perth St., Stratford ..	J. F. Spencer ...	93 Nile St.	2nd and 4th Sunday.
International Typographical Union, No. 139	J. Carlin	"Herald" Office, Strat- ford	H. Miller	"Herald Office"	1st Saturday.
Sudbury: Bartenders' International League, No. 237	A. Gatieu	Sudbury	E. Charron	Sudbury	1st Monday.
Journymen Tailors' Union of America, No. 226	M. Dupont	Sudbury	W. Perry	Box 150	2nd Monday.
Thorold: United Brotherhood of Car- penters and Joiners of America, No. 1677	H. N. Higgin ..	Town Line, Thorold ..	F. H. Parmeter ..	Caslon St.	3rd Thursday.
Toronto: Journymen Barbers' Interna- tional Union, No. 517	W. D. Rockett ..	350 Queen St. West ..	Leon E. Worthall ..	20 Waverley Road ..	4th Thursday.
Bartenders' Union and Bene- fit Society, No. 280	Frank Walker ..	Grand Central Hotel ..	A. O'Leary	248 Havelock St.	4th Sunday.
International Alliance of Bil- lposters', No. 40	W. Reeves	Majestic Theatre	J. Lavene	Star Theatre	3rd Sunday.
Blacksmiths and Helpers', No. 318	Robt. Armstrong	33 Howard Ave.	E. Mason	853 Lansdowne Ave. ...	1st and 3rd Friday.
International Brotherhood of Bookbinders, No. 28	G. T. Hull	1 Denison Ave.	C. R. Hurst	363 Roxton Road	2nd Monday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
Toronto.— <i>Con.</i>					
United Brewery Workers, No. 304	E. Harris .....	.....	John Corcoran ..	Labour Temple	2nd and 4th Friday.
United Brewery Workers	Jas. Dowling ... 33	Sackville St.	A. Cheeseman ..	62 Greenwood Ave. ....	.....
Bricklayers' Masons' and Plasterers' Union, No. 2 ..	H. Fussell	99 Balmoral Ave.	R. A. Watson ..	2 Reid St.	Every Tuesday.
Brick, Tile and Terra Cotta Workers, No. 19	W. Norris	71 McMurray Ave.	J. Howson	24 Cawthra Ave.	1st and 3rd Friday.
Bridge and Structural Iron Workers, No. 4	S. Gamble	119 Denison Ave.	W. B. Gracie ...	343 Symington Ave.	1st and 3rd Tuesday.
Builders' Labourers' Union No. 1	G. T. Drover	11 Dorset St.	J. M. Mackintosh ..	48 Humbert St.	Every Tuesday.
Carriage and Wagon Makers Union, No. 85	F. J. Shield	42 Dagnar Ave.	H. Gain	344 Clinton St.	1st and 3rd Wednesday.
Brotherhood of Railway Car Men, No. 258	James Miller ...	485 Glendinnin Ave.	F. Gouge	77 Vine Ave.	3rd Wednesday.
Brotherhood of Railway Car Men, No. 511	F. Simpkins	1 Nassau Place	William Smith ..	125 Sydenham St. ....	.....
Amalgamated Society Carpenters and Joiners, No. 798. Branch 1	E. Wilkinson	15 Markham Place ..	J. E. Walker ..	307 Greenwood Ave.	Alternate Mondays.
Amalgamated Society Carpenters and Joiners, No. 799. Branch 2	H. Gallop	44 McGill St.	H. E. Durance ..	790 Lansdowne Ave.	Alternate Mondays.
Amalgamated Society Carpenters and Joiners, No. 800. Branch 3	J. K. Riley	92 Davenport Road ..	George Thomson ..	223 Lippincott St.	2nd and 4th Wednesday.
Amalgamated Society Carpenters and Joiners, No. 801. Branch 4	F. Moncur	54 Shirley St.	A. J. Udall	26 Horne Ave.	Alternate Monday.
Amalgamated Society Carpenters and Joiners, No. 802. Branch 5	G. E. Moore	128 Eric Terrace	A. G. Sonnex ..	59 Melville Ave.	2nd Tuesday.
Amalgamated Society Carpenters and Joiners, No. 803. Branch 6	J. Carruthers ...	603 Eastern Ave.	W. Cooley	89 Tiverton St.	1st and 3rd Tuesday.

United Brotherhood of Carpenters, No. 27	M. Myers	Walmer Road	W. H. Cordwell	39 Adams St.	1st and 3rd Friday.
United Brotherhood of Carpenters, No. 1799	G. Baines	39 Helena Ave.	Alex. Suttle	9 Charles St. ....	.....
Cigarmakers' International Union, No. 27	J. McCarthy	118 Manning Ave.	J. Pamphilon	88 Church St.	3rd Monday.
Order of Railway Conductors, No. 17	John Deavitt	399 Palmerston Ave.	A. Riley	706 Markham St.	1st and 3rd Sunday.
Order of Railway Conductors, No. 345	F. Hartley	487 Brunswick Ave.	G. A. Wood	61 Empress Crescent	2nd and 4th Sunday.
Cutters' and Trimmers' Protective Association, No. 185	F. Healey	36 Kippendavie Ave.	H. A. Kellar	59 Grange Ave.	2nd and 4th Friday.
International Brotherhood of Electrical Workers, No. 114	J. E. Duncan	144 Jarvis Street	J. D. Hagerman	1076 Bloor St.	1st and 3rd Thursday.
International Brotherhood of Electrical Workers, No. 353	James Taylor	323 Salem Ave.	D. Niven	232 Church St.	1st and 3rd Wednesday.
Amalgamated Society of Engineers, No. 689	H. H. Ballantyne	21 Burnfield Ave.	J. M. Clements	650 Shaw St.	Alternate Mondays.
International Union of Steam Engineers, No. 152	J. G. Jones	6 King St. West	R. Shepherd	210 Berkeley St.	2nd and 4th Wednesday.
International Union of Steam Engineers, No. 356 .....	.....	.....	T. J. Murphy	997 Lansdowne Ave.	1st and 3rd Wednesday.
Electrotypers' and Stereotypers' Union, No. 21	H. Bartley	973 Logan Ave.	C. W. Lafferty	124 Woolfrey Ave.	1st Thursday.
National Association of Marine Engineers, No. 1	J. W. Aston	85 Cowan Ave.	E. A. Prince	24 Moutray st	Arranged at close of Navigation.
Brotherhood of Locomotive Firemen and Engineers, No. 67	G. E. Crowhurst	90 Wolseley Street	Jas. Pratt	218 Fern Ave.	1st and 3rd Sunday.
Brotherhood of Locomotive Firemen and Engineers, No. 262	W. Hunter	75 Hook Ave.	W. H. Blevins	74 Fairview Ave.	2nd and 4th Sunday.
United Garment Workers of America, No. 202	Barbeau	843 Dovercourt Road	S. I. Cherry	60 Defoe St.	2nd Monday.
Class Bottle Blowers' International Association, No. 66	G. Gardner	Diamond Glass Co. ..	Howard Munn	164 Argyle St.	2nd and 4th Saturday.
Amalgamated Glass Workers' International Association, No. 21	R. Shuttleworth	70 Spruce St.	James Hickey	23 Wardell St.	1st and 3rd Friday.
Granite Cutters' International Association, No. —	W. Nettleship	14 Baker Ave.	W. H. Brown	29 St. Clair Ave. East	4th Thursday.
Lithographers' International Association, No. 12	W. Simpson	11 Burnfield Ave.	J. H. Christie	104 Palmerston Ave.	2nd and 4th Wednesday.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—Continued.

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Night of Meeting.
Toronto.— <i>Con.</i>					
Longshoremen's International Association, No. 646	J. Dowling	33 Sackville St.	S. Stalford	46 Curzon St.	1st Sunday.
Machinists' International Association, No. 235	W. Hagen	844 Queen St. E.	J. O. Clayton ..	141 Sumach St.	2nd and 4th Wednesday.
Mailers' Union (I. T. U.), No. 5	J. G. Gallagher ..	50 Beaconsfield Ave. .	G. A. Webber	2 Wineva Ave.	1st Monday.
Marble Workers' International Association, No. 12	W. Mullen	10 William St.	W. Davey	686 Shaw St.	1st and 3rd Thursday.
Metal Polishers' etc., Union, No. 21	James Spring ..	100 Bellwoods Ave. .	W. Driscoll	467 Gerrard St. East .	2nd and 4th Wednesday.
Moulders' International Union, No. 207	A. V. Mann	44 Geneva Ave.	W. G. Jones	155 Langley Ave.	1st and 3rd Friday.
Moulders' International Union, No. 28	R. Harper	92 O'Hara Ave.	Robt. Harris	110 Ossington Ave. .	1st and 3rd Wednesday.
Moving Picture Machine Operators, No. 173	Geo. Mehl	556 Church St.	W. D. Shank	42 Henderson Ave.	1st and 3rd Sunday.
International Musical Protective Association, No. 149 ..	J. E. Jarrott	221 Dunn Ave.	J. Ball	258 Augusta Ave.	1st Sunday.
Bro. Painters, Decorators, etc., No. 3	Jas. Butler	297 Bolton Ave.	W. C. King	183 Lippincott St.	2nd and 4th Wednesday.
Patternmakers' League of North America, No. — ..	F. Bancroft	18 Sinclair Ave.	J. Graham	350 Delaware Ave.	2nd and 4th Monday.
Photo-Engravers' International Union, No. 35	A. Rothwell	26 Major St.	W. Clark	639 Broadview Ave. .	1st Monday.
Piano and Organ Workers' Union, No. 39 .....	.....	.....	R. J. Whitton	112 Russet Ave.	2nd and 4th Tuesdays.
Operative Plasterers' International Association, No. 48 ..	George McGill ..	265 Margueretta St. .	James Ward	168 Synington Ave. .	2nd and 4th Thursday.
Plasterers' Labourers' Association, No. 1	C. Collett	330 Broadview Ave. .	J. Fidler	Mount Dennis P.O. .	1st and 3rd Tuesday.
Plumbers', Gas and Steam Fitters' United Association, No. 46	F. W. Jenkins ..	355 Delaware Ave.	D. Bullock	256 Kingston Road .	2nd and 4th Friday.
Pressfeeders' Union (Independent)	F. Robinson	102 King St. West ...	J. R. Mason	2 Leonard Ave.	1st Monday.

Textile Workers' of America, (B. Carpet), No. 695	William Allbutt	Cockburn Ave.	A. H. Woodhead	10 Alma Ave.	1st Friday.
Typographical Union, No. 91. Amalgamated Sheet Metal Workers'	A. E. Thompson	624 Ontario st	S. Hadden	110 Front St. East ...	1st Saturday.
Union, No. 30	J. Lawson	Davisville, P.O.	J. S. Chapman ..	294 Margueretta St. ..	1st and 3rd Friday.
Slate and Tile Roofers' Inter- national Union, No. 39	James Hall	108 Claremont St.	Arthur Pullan ..	194 Bleecker St.	1st and 3rd Monday.
Journymen Stonecutters' As- sociation	Thos. Woods	24 McCaul St.	Harry Newson ..	41 River St.	2nd and 4th Friday.
Stone Masons' Union, No. 26. Amalgamated Association of Street and Electric Railway Employees, No. 113	J. E. Jones	36 Hillsboro Ave.	Chas. Robb	901 Shaw St.	1st and 3rd Thursday.
Journymen Tailors' Union of America, No. 132	H. C. Johnston ..	78 Grant St.	Jos. Gibbons	Room 4, Labour Temple	1st Monday, 8 p.m.; 3rd Sunday, 2.30 p.m.
Journymen Tailors' Union of America, No. 156	G. Sangster	68 Vermont Ave.	James Watt	167 Church St.	4th Monday.
Team Owners' Association ..	T. Curtis	c/o Agnew, Tailor, W. Toronto	W. W. Greenwood	213 Symington Ave. ...	1st Monday.
International Brotherhood of Teamsters, No. 457	Joseph Caldwell ..	33 Hamilton St.	J. Gosnell	102 Sherbourne St. ...	2nd and 4th Thursdays.
Commercial Union, No. 1	Jas. Dutton	18 Whitby Ave.	H. R. Barton	36 Sully Crescent	1st and 3rd Sunday.
Order of Railroad Tele- graphers, C. P. R.	M. McKay	79 Hutchison St., Mont- real, Que.	C. E. Hill	362 Brock Ave.	Once a month.
Tilelayers' International Union, No. 37	G. D. Robertson ..	Box 205 Welland	G. D. Norris	Brandon, Man.	Call of Chairman.
Brotherhood of Railway Train- men, No. 322	Chas. Dickson ..	1006 Bathurst St.	W. S. Gray	37 Essex Ave.	1st and 3rd Friday.
Brotherhood of Railway Train- men, No. 255	L. S. Ward	234 Pearson Ave.	H. T. Meredith ..	282 Crawford St.	1st and 3rd Sunday.
Upholsters' International Union, No. 30	T. L. H. McGuire ..	115 Fermanagh Ave ..	J. H. Davison ..	168 St. John's Road ...	1st and 3rd Sunday.
Webb Pressmen's Union, No. 1 Wood, Wire, and Metal Laborers' Union, No. 97	George Moore ...	727 Gladstone Ave. ...	Wm. Owens	283 Grace St.	1st and 3rd Friday.
International Brotherhood of M. of Ways Employees	C. Hewitt	Seaton St.	Wm. Hall	113½ Lansdowne Ave..	3rd Monday.
Udney:	Parker Franks ..	.....	George Coffey ...	134 Sheridan Ave.	Every Tuesday.
	J. Desmond	Udney P.O. ....	.....	.....	5th July of each year.

DIRECTORY OF LABOUR ORGANIZATIONS IN ONTARIO.—*Concluded.*

Name of Organization.	Name of President.	President's Address.	Name of Secretary.	Secretary's Address.	Night of Meeting.
Wallaceburg: Glass Bottle Blowers' Association of America, No. 70 ...	D. A. Haye	930-932 Witherspoon Bldg., Philadelphia Pa.	W. Tanner	930-932 Witherspoon Bldg., Philadelphia, Pa.	1st and 3rd Saturday.
Welland: Bricklayers', Masons', and Plasterers' International Union, No. 32	G. Scott	Welland	C. Roberts	Welland	2nd Wednesday.
Amalgamated Society of Carpenters and Joiners, No. 809	W. Powell	Welland P.O.	A. Laing	Box 121	2nd and 4th Monday.
United Brotherhood of Carpenters and Joiners, No. 969	W. E. Mann	Helens Ave., Welland ..	B. Jackson .....	.....	2nd and 4th Friday.
International Moulders' Union, No. 472	R. Casson	Welland P.O.	E. Jones	Box 272	1st and 3rd Wednesday.
Windsor: Journeymen Barbers' Union, No. 451	A. Kenney	49 Sandwich St. West, Windsor	A. Wickins	18 Ouellette Ave.	4th Wednesday.
Bricklayers' and Masons' International Union, No. 6 ..	R. Small	3 Alexander St., Walkerville	R. G. Thompson.	72 Cameron Ave.	Every Tuesday.
Order of Railway Conductors, No. 494	John Merritt	14 Pelisher St., Windsor	E. Jackson	114 Goyeau St.	2nd and 4th Sunday.
Brotherhood of Locomotive Engineers, No. 390	W. Latcham	22 Parent Ave., Windsor	Geo. Richardson.	59 Aylmer St.	2nd and 4th Tuesday.
National Association of Marine Engineers, No. 11	A. McDonald	28 Crawford Avenue, Windsor	N. Maitland	221 London St. ....	.....

Brotherhood of Locomotive Firemen and Enginemen, No. 421	J. L. Pero	47 Aylmer St., Windsor	A. R. Butler	28 Glengarry Ave.	1st Sunday; 4th Tuesday.
Brotherhood of Railway Trainmen, No. 316	E. J. White	Fort St., Detroit Mich.	Chas. Wildrick	168 Dougall Ave.	2nd and 4th Sunday. 1st and 3rd Wednesday.
International Typographical Union, No. 553	W. J. Walker ..	59 Bruce Ave., Windsor ..	G. E. Morentette	98 Albert St.	2nd Tuesday.
Woodstock: Bricklayers' and Masons' Union, No. 22	A. Hay	Woodstock, P.O.	E. Johnston	15 Norwich Ave.	2nd and 4th Tuesday.
Int. Moulders' Union, No. 249.	William Long ...	265 Mill St., Woodstock	H. E. Porter	Box 746	3rd Friday.
Jour. Tailors' Union of America, No. 33	Joseph Cross	Woodstock	R. N. Heppenstall	Box 605	Third Tuesday.

WAGES AND HOURS OF LABOUR.

Table showing average wages per week and hour, and hours of labour, with comparison between those organized and unorganized in localities as reported also number of days idle and periods of wage payment.

Location and Title of Organization.	Average wages per week.		Average wages per hour.		Hours of labour first 5 days.		Hours on Saturday.		Total hours per week.		Average days idle.	Period of wage payments.
	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.		
ALLANDALE:												
Order of Railway Conductors, No. 355.....	\$ 23 00	\$ c. 25 00	c. 33.6	33.6	mileage system	.....	.....	.....	75	75	.....	monthly
Bro. of Locomotive Engineers, No. 486.....	mileng 25 00	same	same	same	mileage basis	.....	.....	.....	.....	.....	.....	monthly
Bro. of Locomotive Firemen and Enginemen, No. 442..	17 50	17 50	25½	25½	varies	.....	.....	.....	.....	.....	.....	monthly
AMHERSTBURG:												
Int. Bro. of Steam Shovel and Dredgemen, No. 20.....	32 00 all org	all org	35	.....	60	60	12	12	72	72	60	fortnightly
Intern. Rock Drillers' Assoc.	16 50 all org	all org	25	.....	55	.....	11	.....	66	.....	100	fortnightly
BELLEVEILLE:												
Bro. of Locomotive Engineers, No. 189.....	30 00	30 00	37	37	50	50	10	10	60	60	15	monthly
Bro. of Locomotive Firemen and Enginemen, No. 66..	18 00	18 00	.....	.....	varies	.....	.....	.....	varies	.....	varies	monthly
Painters and Decorators.....	12 00	10 60	22½	20	45	45	8	8	53	53	.....	weekly
Bricklayers' and Masons' Union, No. 30.....	16 20	14 70	30	27½	45	45	9	9	54	54	140	weekly and
BERLIN:												
United Bro. of Carpenters and Joiners, No. 553.....	17 00	14 13	27½	25	47½	47½	9	9	56½	56½	70	fortnightly
Bricklayers' and Masons' Union, No. 12.....	23 22 all org	all org	43	.....	45	45	9	9	54	54	75	fortnightly
Cigar Makers' Intern. Union, No. 422.....	13 20	13 20	30	24	40	50	4	5	44	55	20	weekly
Hod Carriers' Union, No. 160.....	15 12 all org	all org	28	.....	45	.....	9	.....	54	.....	75	fortnightly
Federal Union, No. 17.....	12 00	8 25	20	14½	50	50	9	9	59	59	125	fortnightly
Journ. Tailors' Union of America, No. 264 (Male).....	12 00	10 80	22½	20	45	45	9	9	54	54	36	fortnightly
Journ. Tailors' Union of America, No. 264 (Female)...	8 00	7 00	15	13	45	45	9	9	54	54	36	fortnightly
Boot and Shoe Workers' Union, No. 206.....	10 75	10 75	18½	18½	50	50	7	7	57	57	30	fortnightly
United Brewery Workers', No. 170.....	13 00	.....	25	.....	47½	.....	7½	.....	55	.....	.....	weekly
BLENHEIM:												
Maintenance of Way Employees, No. 502.....	9 00	9 00	15	15	50	50	10	10	60	60	.....	monthly
BRANTFORD:												
Bartenders' Intern. League, No. 182.....	13 50	11 50	25	20	45	45	12	12	57	57	.....	wk., f., m.

Bricklayers' and Masons' Union, No. 9.....	21	12	18	00	48	30	40	50	4	10	44	60	96	weekly
United Bro. of Carpenters and Joiners, No. 498.....	15	00	30	00	30	45	45	.....	5	.....	50	.....	96	weekly
Amalg. Soc. Carpenters and Joiners, No. 783.....	14	50	12	50	30	25	45	.....	5	5	50	50	70	weekly
Intern. Moulders' Union, No. 29.....	15	00	12	00	25	20	50	.....	9	9	59	59	60	fortnightly
American Federation of Musicians, No. 467.....	3	00	.....	.....	50	.....	.....	.....	.....	.....	.....	.....	.....	nightly
Journ. Plumbers, Gas and Steam Fitters, No. 186.....	16	00	.....	.....	32	.....	45	50	5	4	50	54	75	weekly
Journ. Tailors' Union of America, No. 117 (Male).....	15	00	15	00	25	less	50	longer	10	longer	60	longer	90	weekly
Journ. Tailors' Union of America, No. 117 (Female).....	9	00	9	00	15	less	50	longer	10	longer	60	.....	90	weekly
Barbers' Union, No. 298.....	12	00	all org	.....	19	.....	50	.....	13½	.....	63½	.....	.....	weekly
Typographical Union, No. 378.....	14	50	.....	.....	30	.....	42½	.....	5½	.....	48	.....	.....	weekly
Printers' Freshmen and Assistants.....	14	40	.....	.....	30	.....	42½	.....	5½	.....	48	.....	.....	weekly
Plasterers' Union, No. 164.....	20	00	20	00	40	40	45	45	5	5	50	50	70	weekly
BRIDGEBURG:														
Bro. of Railway Carmen.....	12	40	12	40	18	18	50	50	10	10	60	60	.....	monthly
Bro. of Locomotive Engineers.....	27	72	27	72	36	36	55	55	11	11	66	66	12	monthly
BROCKVILLE:														
Journ Barbers' Intern. Union, No. 387.....	12	00	.....	.....	17	.....	55	.....	15	.....	70	.....	.....	weekly
Bro. of Locomotive Engineers, No. 118.....	50	00	30	00	.....	.....	.....	.....	.....	.....	.....	.....	.....	monthly
Bro. of Locomotive Firemen and Enginemen, No. —.....	15	00	15	00	.....	.....	.....	.....	.....	.....	.....	.....	15	monthly
Intern. Moulders' Union, No. 329.....	15	00	15	00	25	25	50	50	10	10	60	60	.....	fortnightly
Tailors' Union of America, No. 262 (Male).....	10	00	9	00	16½	15	50	50	10	10	60	60	30	weekly
Tailors' Union of America, No. 262 (Female).....	6	00	5	40	10	9	50	50	10	10	60	60	30	weekly
CARLETON PLACE:														
Machinists Helpers' and Labourers' (F.L.U.) No. 12,892.....	8	00	8	00	16	16	45	45	5	5	50	50	.....	monthly
Intern. Moulders' Union, No. 362.....	18	00	18	00	30	30	50	50	10	10	60	60	.....	fortnightly
Maintenance of Way Employees, No. 222.....	10	20	10	20	17	17	50	50	10	10	60	60	.....	monthly
CHAPLEAU:														
Bro. of Locomotive Engineers, No. 319.....	25	00	25	00	.....	.....	varies	.....	.....	.....	.....	.....	.....	monthly
Bro. of Locomotive Firemen and Enginemen, No. 321.....	19	80	19	80	36	36	50	50	5	5	55	55	holdys	monthly
Int. Assoc. of Machinists, No. 525.....	19	80	19	80	36	36	60	60	10	10	70	70	.....	monthly
Bro. of Railway Trainmen, No. 246.....	25	00	25	00	36	36	60	60	10	10	70	70	.....	monthly
CHATHAM:														
United Garment Workers of America, No. 44.....	.....	.....	.....	.....	.....	.....	42½	42½	4½	4½	47	47	.....	weekly
Typographical Union, No. 421.....	12	00	12	00	25	25	40	40	8	8	48	48	none	weekly
COLLINGWOOD:														
Journ. Barbers' Intern. Union, No. 528.....	12	00	12	00	19	19	50	50	13	13	63	63	hold's	weekly
Bricklayers' and Masons' Union, No. 19.....	20	00	15	00	37½	25	45	50	9	10	54	60	175	fortnightly
Intern. Assoc. of Machinists, No. 627.....	16	00	16	00	25	25	50	50	7	7	57	57	.....	fortnightly
Intern. Union Steam Engineers, No. 321.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Intern. Longshoremen's Assoc., No. 476.....	16	50	16	50	27½	27½	50	50	10	10	60	60	120	after job
CORNWALL:														
Journ. Tailors' Assoc. of America, No. 355.....	12	00	12	00	20	20	50	50	10	10	60	60	20	weekly
DESBORO:														
Order of Railway Telegraphers, (C.N.R.) No. 43.....	10	00	10	00	14	14	60	60	12	12	72	72	one	monthly

Table showing average wages, etc.—Continued.

Location and Title of Organization.	Average wages per week.		Average wages per hour.		Hours of labour first 5 days.		Hours on Saturday.		Total hours per week.		Average days idle.	Period of wage payments.
	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.		
DUNDAS:	\$ c.	\$ c.	c.	c.								
Intern. Moulders' Union No. 269.....	15 00	15 00	28	28	50	50	5	5	55	55	.....	fortnightly
ELMIRA:												
Intern. Union of Wood Workers', No. 129.....	12 00	12 00	20	20	50	50	5	5	55	55	12	fortnightly
ESSEX:												
Bro. of Maintenance of Way Employees, No. 312.....	12 00	12 00	17	17	50	50	10	10	60	60	50	monthly
FORT WILLIAM:												
Intern. Bro. of Boiler Makers & Ship Builders, No. 505	20 00	15 75	40	30	47½	55	5	5	52½	60	30	monthly
Intern. Bro. of Boiler Makers & Ship Builders Helpers	12 00	.....	26½	.....	47½	55	5	5	52½	60	30	monthly
Bricklayers' and Masons' Union, No. 25.....	25 00	all org.	60	.....	45	.....	9	.....	54	.....	100	fortnightly
Analg. Soc. of Carpenters and Joiners, No. 787.....	24 00	24 00	40	40	50	50	10	10	60	60	50	fortnightly
Intern. Longshoremen's Assn., No. 746 (Coal Handlers)	17 40	14 40	29	24	50	50	10	10	60	60	75	monthly
Intern. Longshoremen's Assn., No. 479.....	20 00	all org.	25	.....	60	.....	15	.....	75	.....	150	weekly
Order of Railway Conductors, No. 286.....	40 00	40 00	50	50	.....	.....	.....	.....	.....	.....	none	monthly
Bro. of Locomotive Engineers, No. 243.....	27 00	.....	50	.....	45	.....	9	.....	54	.....	.....	fortnightly
Bridge and Structural Iron Workers, No. 53.....	15 00	15 00	25	25	50	50	9	9	59	59	.....	fortnightly
Intern. Moulders' Union, No. 429.....	22 00	all org.	50	.....	40	.....	4	.....	44	.....	none	fortnightly
Plumbers, Gas Fitters, etc.....												
GALT:												
Journ. Barbers' Union, No. 413.....	10 00	.....	17	.....	45	.....	14	.....	59	.....	.....	weekly
Boot and Shoe Workers' Union, No. 330.....	16 00	16 00	28	28	50	50	9	9	59	59	72	fortnightly
Amalg. Soc. of Engineers, No. 666.....	12 38	12 38	22½	22½	50	50	5	5	55	55	none	fortnightly
Intern. Assoc. of Machinists, No. 120.....	13 00	13 00	23½	23½	55	55	5	5	60	60	10	fortnightly
Intern. Moulders' Union, No. 447.....	14 00	14 00	25	25	50	50	5	5	55	55	25	fortnightly
Typographical Union, No. 411.....	13 00	10 00	27½	20	42½	45	5	9	47½	54	.....	week, or fort.
QUEBEC:												
Journ. Barbers' Intern. Union, No. 310.....	12 00	.....	20	.....	48	.....	13	.....	61	.....	none	weekly
Bartenders' Intern. League, No. 104.....	12 00	9 00	16½	14½	60	60	12	12	72	72	10	monthly
Bricklayers and Masons' Union, No. 3.....	23 28	22 68	48½	42	45	45	8	9	48	54	90	week, or fort.

United Brewery Workmen, No. 300.....	11 00	11 00	17½	17½	47½	5	5	52½	.....	fortnightly
Moulders' Union of North America, No. 212.....	20 00	20 00	35	35	47½	8½	8½	56	.....	week, or fort.
Bro. of Painters and Decorators, No. 837.....	12 00	12 00	20	20	50	9	9	59	84	weekly
Piano and Organ Workers', No. 34.....	12 10	12 10	22	22	50	5	5	55	10	fortnightly
Typographical Union, No. 391.....	14 00	all org	33½	.....	42	6	.....	48	hol'd's	weekly
HAMILTON										
Journ. Barbers' Union, No. 131.....	13 20	10 20	21	16½	50	13	13	63	none	weekly
Barbers' Intern. League, No. 197.....	15 00	10 00	25	15½	55	5	5	60	2	weekly
Bricklayers' and Masons' Union, No. 1.....	22 00	20 00	50	35	40	4	9½	41	.....	week, or fort.
Intern. Bro. of Bookbinders, No. 114.....	14 50	14 50	30	30	44	4	4	48	none	weekly
Boot and Shoe Workers' Union, No. 444.....	11 00	.....	20	.....	50	5	.....	55	15	weekly
Boot and Shoe Workers' Union, No. 234.....	8 00	.....	18	.....	45	4	.....	49	12	weekly
Boot and Shoe Workers' Union, No. 228.....	peewk	all org	.....	.....	50	5	.....	55	6	weekly
Boot and Shoe Workers' Union, No. 232 (Cutters).....	14 85	all org	27	.....	50	5	.....	55	18	weekly
Broom and Whisk Makers' Union, No. 9.....	14 00	.....	28½	.....	45	4½	.....	49½	10	weekly
Amalg. Soc. Carpenters and Joiners, No. 785.....	15 40	.....	35	.....	40	4	.....	44	.....	fortnightly
United Bro. Carpenters and Joiners, No. 18.....	17 60	16 90	40	32½	40	4	4½	52	30	weekly
Cigar Makers' Intern. Union, No. 55.....	13 00	all org	24½	40	.....	10½	10½	63	25	monthly
Order of Railway Conductors, No. 27.....	21 00	21 00	35	35	52½	6½	.....	56½	hol'dy	fortnightly
Amalg. Soc. of Engineers, No. 646.....	15 00	.....	35	35	varies	.....	.....	65	.....	monthly
Bro. of Locomotive Engineers, No. 133.....	25 00	25 00	35	.....	55	10	.....	.....	.....	wk, or fort.
Canadian Assoc. Stationary Engineers, No. 2.....	14 50	.....	22	.....	50	5	5	55	60	fortnightly
Federal Labour Union, No. 11 (City Firemen).....	12 00	10 00	20	16½	50	5	.....	55	.....	weekly
Journ. Horseshoers', No. 72.....	15 00	.....	25	.....	50	5	.....	55	.....	week, or fort.
Moulders' Intern. Union, No. 26.....	15 00	13 75	30	25	45	5	5	50	33	weekly
Musicians' Protective Assoc., No. 298.....	18 00	.....	32½	.....	50	5	.....	55	.....	week, or fort.
Bro. of Paintors, Decorators etc., No. 205.....	17 50	10 25	32½	20½	45	5	5	50	55	weekly
Pattern Makers' League of North America.....	12 00	10 00	30	24	30	12	12	42	90	weekly
Sheet Metal Workers' Intern. Union, No. 61.....	21 00	all org	47½	.....	40	4	.....	44	90	fortnightly
Intern. Alliance of Stage Employees, No. 129.....	12 00	.....	20	.....	50	9	.....	59	.....	fortnightly
Journ. Stonecutters' Assoc. of N. A.....	13 00	13 00	20	20	55	11	11	66	none	fortnightly
Stove Mounters' Union, No. 35.....	14 00	.....	24	.....	50	5	.....	55	.....	weekly
Assoc. Street and Electric Railway Employees, No. 127.....	17 00	14 00	35½	.....	50	10	10	60	7	monthly
Tobacco Workers' Intern. Union, No. 48.....	17 00	13 20	40	30	43½	4½	.....	48	7	weekly
Bro. of Railway Trainmen, No. 226.....	17 50	13 20	40	30	40	4	4	44	100	weekly
Typographical Union, No. 129.....	25 00	25 00	.....	.....	.....	.....	.....	.....	.....	monthly
Wood, Wire and Metal Lathers Union, No. 145.....	27 64	27 64	.....	.....	.....	.....	.....	.....	none	monthly
HAYLOCK:										
Bro. of Locomotive Engineers, No. 658.....	18 43	18 43	.....	.....	.....	.....	.....	.....	none	monthly
Bro. of Railway Trainmen, No. 293 (Conductors).....	15 90	15 90	26½	26½	50	10	10	60	60	monthly
Bro. of Railway Trainmen, No. 293 (Trainmen).....	10 00	10 00	16½	16½	50	10	10	60	60	monthly
INGERSOLL:										
Bro. of Maintenance of Way Employ, No. 503 (Foremen).....	15 90	15 90	26½	26½	50	10	10	60	60	monthly
Bro. of Maintenance of Way Employ, N. 503 (Labour's).....	10 00	10 00	16½	16½	50	10	10	60	60	monthly

Table showing average wages per week, etc. —Continued.

Location and Title of Organization.	Average wages per week.		Average wages per hour.		Hours of labour first 5 days.		Hours on Saturday.		Total hours per week.		Average days idle.	Period of wage payments.
	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.		
JACK FISH:	\$ c.	\$ c.	c.	c.	50	50	10	10	60	60	none	monthly
Bro. of Maintenance of Way Employees.....	10 20	9 60	17	16								
KENORA:												
Bro. of Railway Carmen, No. 236.....	15 76	15 76	30	30	47½	47½	5	5	52½	52½	65	monthly
Bro. of Assoc. of Machinists, No. 28.....	22 00	22 00	42½	42½	45	45	9	9	54	54	none	monthly
KINGSTON:												
Journ. Barbers' Intern. Union, No. 514.....	12 00	12 00	18½	18½	50	50	14	14	64	64	none	weekly
United Bro. of Carpenters and Joiners, No. 249.....	15 00	15 00	31	25½	40	50	8	10	48	60	45	fortnightly.
Nat. Assoc. of Marine Engineers, No. 4.....	20 00	20 00	27	27½	45	45	9	9	54	54	52	fort. or mon.
Building Labourers' Union, No. 66.....	13 40	13 00	28	23½	40	47½	8	9½	48	57	105	fortnightly
Intern. Longshoremen's Assoc., No. 229.....	10 00	10 00	15		50		10		60		90	weekly
Masters' and Mates' Assoc.....	18 00											
Amalg. Sheet Metal Workers' Alliance, No. 117.....	15 00	15 00	27½	27½	45	45	9	9	54	54		weekly
Intern. Moulders' Union, No. 252.....	15 00	13 75	27½	25	50	50	5	5	55	55		fortnightly
Bro. of Painters, Decorators, etc., No. 114.....	15 00		27½		45		9		54		30	weekly
Lake Mariners' Union.....	9 00	6 00									120	only or trip
Plumbers, etc. Union, No. 221.....	15 50		27½		45		9		54		25	weekly
Journ. Stonecutters' of North America.....	21 60		45		40		8		48		75	fortnightly
Journ. Tailors' Union of America, No. 263 (Male).....	11 00		20½		45		9		54		70	weekly
Journ. Tailors' Union of America, No. 263 (Female).....	4 50		9		45		9		54		70	weekly
Typographical Union, No.....	14 40	14 40	30	26½	43	48	5	6	48	54	none	weekly
LINDSAY:												
Bro. of Locomotive Engineers, No. 174.....	25 00	25 00										monthly
Bro. of Locomotive Firemen and Enginemen, No. 136.....	14 30	14 00	23	23	50	50	10	10	60	60	20	monthly
Bro. of Railway Trainmen, No. 308.....	14 00	14 00	24	24	50	50	10	10	60	60	40	monthly
LONDON:												
Journ. Barbers' Intern. Union, No. 366.....	13 00	11 50	22½	18	44	49	14	15	58	64		weekly
Barbenders' Intern. League, No. 137.....	14 00		30		40		7		47			weekly
Bill Posters' and Billers' Union, No. 22.....	12 00	12 00									none	weekly
Boiler Makers' and Iron Ship Builders' Union, No. 203.....	19 00	14 00	33	24	50	50	7½	7½	57½	57½	none	wk. or mon

Boot and Shoe Workers' Intern. Union, No. 88.	work	piece	50	50	5	5	55	55	14	weekly
Intern. Union Brewery Workers, No. 381.	18 37	19 80	50	50	9	4	59	49	none	weekly
Bricklayers' and Masons' Union, No. 5.	45	37½	40	45	4	4	44	49	100	weekly
Amalg. Soc. Carpenters and Joiners, No. 783.	28	13 86	45	45	4½	4½	49½	49½	50	weekly
United Bro. Carpenters and Joiners, No. 1946.	27	13 36	42½	42½	4½	4½	47	47	20	weekly
Cigar Makers' Union, No. 278.	24	10 50	40	40	4	4	44	44	...	weekly
Amalg. Soc. of Engineers, No. 577.	25	13 75	50	50	5	5	55	55	3	wk. or mon.
Bro. of Locomotive Engineers, No. 68.	41½	25 00	50	50	10	10	60	60	13	monthly
Canadian Assoc. Stationary Engineers, No. 30.	20	12 00	50	50	10	10	60	60	none	weekly
Bro. Locomotive Firemen and Enginemen, No. 468.	27	20 00	50	50	10	10	60	60	...	monthly
United Garment Workers' of America, No. 33 (Male).	38½	18 00	42½	45	4	4	46½	49	30	weekly
United Garment Workers' of America, No. 33 (Female).	16	9 00	42½	45	4	4	46½	49	30	weekly
Granite Cutters' Intern. Assoc.	19½	18 00	37½	40	4	4	44	44	26	weekly
Bro. of Maintenance of Way Employees, No. 195.	17	12 00	60	60	10	10	100	100	...	monthly
Musicians' Union, No. 279.	16 50	16 50	...	...	...	...	...	...	...	fortnightly
Fed. Assoc. of Letter Carriers, No. 4.	35	15 40	40	40	4	4	44	44	none	weekly
Plumbers, Steamfitters, etc. Union, No. 289.	...	...	43½	50½	4½	4½	48½	55	25	weekly
Printing Pressmen's and Assistants' Union, No. 173.	22½	17 00	75	75	15	15	90	90	...	monthly
Bro. of Railway Trainmen, No. 240.	25	12 00	30	30	12	12	42	42	75	weekly
Intern. Alliance Theatrical Stage Employees, No. 105.	17½	15 00	60	60	12	12	84	84	none	monthly
Order of Railway Telegraphers, No. 1 (G.T.R.).	15	13 75	60	60	12	12	72	72	none	monthly
Order of Railway Telegraphers, No. 4.	27 00	27 00	varies	varies	...	...	...	...	...	monthly
Bro. of Railway Trainmen, No. 415.	33½	16 00	40	45	8	9	48	54	none	weekly
Typographical Union, No. 133.	20	12 00	50	50	10	...	60	60	...	fortnightly
Intern. Bro. of Electrical Workers, No. 120.	...	12 00	...	...	...	...	...	...	...	...
MIDLAND:	varies	varies	varies	varies	...	...	...	...	varies	after job
Intern. Longshoremen's Assoc., No. 19.	40	25	...	...	...	...	...	...	...	...
MILVERTON:	...	...	...	...	...	...	...	...	...	...
Maintenance of Way Employees, No. 163.	20	12 00	50	50	10	10	60	60	none	monthly
NIAGARA FALLS:	...	...	...	...	...	...	...	...	...	...
Amalg. Soc. Carpenters and Joiners, No. 793.	40	19 20	40	40	8	8	48	48	5	weekly
United Bro. Carpenters and Joiners, No. 713.	32½	19 20	40	40	8	8	48	48	36	weekly
Intern. Union of Steam Engineers, No. 232.	35	21 00	50	50	10	...	60	60	...	fortnightly
Journ. Stonecutters' Assoc.	50	24 00	40	40	8	8	48	48	75	fortnightly
Bro. of Railway Trainmen.	25 00	25 00	...	...	...	...	...	...	...	monthly
NORTH BAY:	...	...	...	...	...	...	...	...	...	...
Bro. of Railway Carmen, No. 192.	21	11 50	47½	52½	7	7	54½	59½	9	monthly
Order of Railway Conductors, No. 242.	41½	20 00	40	40	8	8	48	48	27	monthly
Bro. of Locomotive Engineers, No. 308.	...	...	...	...	...	...	...	...	varies	monthly
Bro. of Maintenance of Way Empl. No. 244.	11 40	12 60	50	50	10	10	60	60	none	monthly
Order of Railway Telegraphers, No. 99.	varies same	varies same	60	60	12	12	72	72	none	monthly
Bro. of Railway Trainmen, No. 249.	25	18 00	60	60	12	12	72	72	80	monthly

Intern. Assoc. of Stonecutters'.....	19 36	15 00	44	34	40	40	4	4	44	44	150	fortnightly
Amalg. Assoc. of Street and Electric R Empl., No. 279	15 00	15 00	22	22	50	50	10	10	60	60	.....	fortnightly
Journ Tailors' Union of America, No. 143 (Male)....	13 00	10 26	24	19	45	45	9	9	54	54	60	weekly
Journ Tailors' Union of America, No. 143 (Female)...	8 10	5 40	15	10	45	45	9	9	54	54	60	weekly
Bro. of Railway Trainmen, No. 129.....	Schedule.....											monthly
Bro. of Railway Trainmen, No. 185 (Conductors).....	23 10	23 10	33	33	50	50	10	10	70	70	varies	monthly
Bro. of Railway Trainmen, No. 185 (Brakesmen).....	15 63	15 63	22½	22½	50	50	10	10	70	70	varies	monthly
Canadian Typographical Union, No. 1.....	19 50		40		42½	42½	5½		48			fortnightly
OWEN SOUND:												
Bricklayers' and Masons' Union, No. 11.....	24 30	18 90	45	35	45	45	9	9	54	54	90	fortnightly
Moulders' Union of North America.....	15 00	13 50	27½	25	45	45	9	9	54	54	75	fortnightly
Stonecutters' Assoc.	21 60		45		40		8		48			fortnightly
PALMERSTON:												
Bro. of Locomotive Firemen and Enginemen, No. 181..	15 00	15 00	mile.	mile.								monthly
PARRY SOUND:												
Intern. Assoc. of Machinists, No. 518.....	17 70	14 63	30	26½	50	50	9	9	59	59	15	monthly
Bro. of Maintenance of Way Employees, No. 447.....	11 40		19		50		10		60		none	monthly
Bro. of Railway Trainmen, No. 759.....	20 00	20 00			varies						varies	monthly
PENETANGUISHENE:												
Canadian Assoc. of Masters and Mates.....	28 00	28 00			varies						125	monthly
PETERBOROUGH:												
Journ. Barbers' Intern. Union No. 402.....	13 00	9 50										weekly
Brewery Workers' Union, No. 304.....	12 00	11 00	21½	20	47½	47½	8	8	55½	55½	.....	weekly
Bricklayers' and Masons' Intern. Union, No. 17.....	19 20	19 20	40	35	40	45	8	9	48	54	100	fortnightly
Bro. of Maintenance of Way Employees, No. 211.....	10 46	9 87	15½	14½	50	50	10	10	70	70	none	monthly
Moulders' Intern. Union, No. 191.....	16 00		27½		50		7		57		28	week, or fort.
Bro. of Painters, Decorators, etc., No. 379.....	13 50	10 80	25	20	45	45	9	9	54	54	30	weekly
Pattern Makers' League of North America.....	17 85		32½		50		5		55		12	fortnightly
Typographical Union, No. 248.....	14 00		29		40		8		48		none	weekly
PORCUPINE:												
Western Fed. of Miners, No. 145.....	17 50		25		50		10		60		175	monthly
PRESCOTT:												
Intern. Longshoremen's Union No. 244.....	13 00	13 00	35	35	35		7	7	42	42	137	weekly
PRESTON:												
Moulders' Intern. Union, No. 314.....	18 00	11 00	27½	17½	50		9	9	59	59	50	weekly
PORT ARTHUR:												
Amalg. Soc. Carpenters and Joiners.....	24 00	24 00	40	40	50		10	10	60	90	50	fortnightly
United Bro. Carpenters and Joiners, No. 285.....	24 00	19 50	40	32½	50		10	10	60	60	60	fortnightly
Intern. Assoc. of Machinists, No. 820.....	18 00	18 00	30	30	47½		8	8	55½	55½	none	week, or mon.
United Assoc. Plumbers, Steamfitters, etc., No. 378..	20 00	all org	37½		45				54		10	fortnightly
Sheet Metal Workers' Intern. Union, No. 285.....	20 50	18 00	37½	32½	50		5	5	55	55	none	week, or fort.
Journ. Stonecutters' of North America.....	26 40	all org	60		40		4		44		125	fortnightly
PORT HOPE:												
Moulders' Intern. Union, No. 189.....	20 00		35		47½		9½		57		30	fortnightly

Table showing average wages per week, etc.—Continued.

Location and Title of Organization.	Average wages per week.		Average wages per hour.		Hours of labour first 5 days.		Hours on Saturday.		Total hours per week.		Average days idle.		Period of wage payments.
	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	Organized.	Unorganized.	
RAINY RIVER:													
Order of Railway Conductors, No. 30.....	\$ c. 25 00	\$ c. 25 00	c. 42	c. 42	45	45	9	9	54	54	54	54	monthly
Bro. of Locomotive Firemen and Enginemen, No. 750.	mileage				varies								monthly
RICHMOND HILL:													
Order of Railway Telegraphers.....	14 47	14 47	17	17	60	60	12	12	84	84	6	6	monthly
RIDGEMOUNT:													
Order of Railway Telegraphers, No. 16.....	15 00	15 00	16	16	60	60	12	12	84	84	10	10	monthly
ST. CATHARINES:													
Journ. Barbers' Int. Union, No. 1	13 00	13 00	17½	17½	60		15		75		none		weekly
Bro. of Brewery Workers, No. 305	9 00		15		45		9		54				weekly
Bricklayers' and Masons' Union, No. 4	24 00		48		45		5		50		100		weekly
Amal. Soc. of Carpenters and Joiners, No. 61	17 50	13 50	35	27	45		5		50		20		weekly
United Bro. of Carpenters and Joiners, No. 38	17 50	15 00	35	30	45		5		50		20		weekly
Cigarmakers' Int. Union, No. 140	12 00	8 00	25	13½	40	50	8	10	48	60	none		weekly
Metal Polishers', Buffers, etc., of N. A., No. 97	15 00	15 00	25	25	47½	47½	7½	7½	55	55			week or fortnight
Bro. of Painters, Decorators, etc., No. 407	15 00	15 00	30	30	45	45	5	5	50	50	62		weekly
Unit. Assoc. Plumbers, Steamfitters, etc., No. 244	15 00	15 00	30	30	45	45	5	5	50	50			weekly
Journ. Tailors' Union of America, No. 235 (Male)	15 00	less	25	less	50	50	10	10	60	60	50		weekly
Journ. Tailors' Union of America, No. 235 (Female) ..	9 00	less	15	less	50	50	10	10	60	60	50		weekly
ST. MARY'S:													
Stone Cutters' Union	21 60	all org	45		40		8		48		75		fortnightly
ST. THOMAS:													
Boilermakers and Iron Ship Builders, No. 413.....	15 00	15 00	29½	29½	47½	47½	7½	7½	55	55	6	6	monthly
Bricklayers' and Masons' Int. Union, No. 8	21 60	18 90	40	35	45	45	9	9	54	54	50	50	fortnightly
Cigar Makers' Union, No. 420	12 00	12 00	30	30	40	40	5	5	45	45	14	14	weekly
Order of Railway Conductors, No. 13	30 00	30 00									none		monthly
Bro. of Locomotive Engineers, No. 529	28 00	28 00									30	30	monthly
Int. Assoc. of Machinists, No. 294	17 25	12 50	34½	25	45	45	5	5	50	50	40	40	monthly
Painters, Decorators, etc., No. 701	13 50	13 50	22½	22½	50	50	9	9	59	59			weekly

Table showing average wages per week, etc.—*Continued.*

Location and Title of Organization.	Average wages per week.		Average wages per hour.		Hours of labour first days.		Hours on Saturday.		Total hours per week.		Average days idle.	Period of wage payments.		
	Organized.		Unorganized.		Organized.		Unorganized.		Organized.				Unorganized.	
	\$	c.	\$	c.										
Toronto.—Continued.														
Ceramic, Mosaic and Encaustic Tile Layers, No. 37	19	80	45	45	c.		40	4	44	44	.....	weekly		
Bro. of Railway Trainmen, No. 322	15	00	28	28	30	vary	50	10	60	60	varies	monthly		
Bro. of Railway Trainmen, No. 255	20	00	30	30							.....	monthly		
Upholsterers' Int. Union, No. 30	15	50	32½	32½	44		44	4	48	48	28	weekly		
Webb Pressmen's Union, No. 1	18	00	all org.	37½	40		40	8	48	48	.....	weekly		
Wood, Wire, and Metal Lathers' Union, No. 97	10	50	7 50	24	14½		47½	4	44	52½	85	fortnightly		
UNION:														
Bro. of Maintenance of Way Empl.	10	00	10 00	16	16		50	10	60	60	3	monthly		
WALLACEBURG:														
Glass Bottle Blowers of America, No. 70	30	00	15 00	61½	25½		54	5	49	59	65	fortnightly		
WELLAND:														
Bricklayers' and Masons' Union, No. 32	24	30	24 30	45	45		45	9	54	54	120	weekly		
Amal. Soc. Carpenters and Joiners, No. 809	17	10	14 70	30	27½		47½	9½	57	57	10	week. or fort.		
United Bro. Carpenters and Joiners, No. 969	16	95	16 95	30	30		47½	9	56½	56½	.....	weekly		
Int. Moulders' Union, No. 472	17	25	.....	30	50		.....	7½	57½	57½	.....	fortnightly		
WINDSOR:														
Jour. Barbers' Int. Union, No. 451	12	00	12 00	15½	62½		62½	16½	79	79	none	weekly		
Bricklayers' and Masons' Union, No. 6	29	70	29 70	55	45		45	5	50	50	90	weekly		
Order of Railway Conductors, No. 494	18	00	18 00	30	30		50	10	60	60	none	monthly		
Bro. of Locomotive Engineers, No. 390	25	00	25 00	36	36		.....	.....	.....	.....	.....	monthly		
Nat. Assoc. of Marine Engineers, No. 11	22	00	22 00	30½	60		60	12	72	72	30	monthly		
Bro. of Locomotive Firemen and Enginemen, No. 421	18	00	18 00	23	60		60	12	72	72	30	monthly		
Bro. of Railway Trainmen, No. 318	18	00	18 00	.....	.....		.....	.....	.....	.....	.....	monthly		
Typographical Union, No. 553	14	00	12 00	29	44		44	4	48	48	.....	weekly		
WOODSTOCK:														
Bricklayers' and Masons' Union, No. 22	21	60	21 60	40	45		45	9	54	54	120	fortnightly		
Int. Moulders' Union, No. 249	17	70	13 25	30	50		50	9	59	59	100	weekly		
Journ. Tailors' Union of America, No. 33 (Male)	13	50	13 50	25	45		45	9	54	54	.....	fortnightly		
Journ. Tailors' Union of America, No. 33 (Female)	8	00	8 00	15	45		45	9	54	54	.....	fortnightly		

DIRECTORY OF CENTRAL LABOUR ORGANIZATIONS IN ONTARIO.

Name of Organization.	Date Organized.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
BERLIN:				
Twin City Trades and Labour Council	1900	Louis B. Albricht .	Box 665, Berlin ..	2nd & 4th Monds.
BRANTFORD:				
Trades and Labour Council	1886	H. J. Symons	150 Cayuga Street	1st & 2nd Weds.
BROCKVILLE:				
Trades and Labour Council	1900	G. L. Barclay	73 Bartholomew St.	Every Friday.
FOET WILLIAM:				
Trades and Labour Council	1907	F. Stephens	P. O. Box 224.....	2nd & 4th Weds.
GALT:				
Galt and Preston Trades and Labour Council		Arthur L. Philp ..	Box 1010	
GUELPH:				
Trades and Labour Council	1898	Freeman Felker ..	114 Northumberland St.	2nd & 4th Frids.
HAMILTON:				
Trades and Labour Council	1888	W. R. Rollo	P. O. Box 323.....	1st & 3rd Frids.
Building Trades Council...		W. Brown	Arthur Ave.	2nd & 4th Tues.
Garment Workers' District Council	1898	C. Bambrick	421 John St. North	2nd Wednesday.
KINGSTON:				
Trades and Labour Council		W. Driscoll	110 Lower Bagot St	
LONDON:				
Trades and Labour Council	1902	H. B. Archer	455 St. James' St. ..	1st & 3rd Weds.
OTTAWA:				
Allied Trades and Labour Association	1897	Wm. Lodge	21 Creighton St. ..	1st & 3rd Thur.
National Trades and Labour Council	1907	Sam Kennedy	178 Avon Lane, New Edinboro...	1st & 3rd Thurs.
Building Trades Council		Jos. Cinqmars	13 Poplar St.	
Allied Printing Trades Council		W. C. Blount	375 Lyon Street...	
PETERBOROUGH:				
Trades and Labour Council		Thos. Dark	Braidwood Ave. ...	
POBT ARTHUR:				
Trades and Labour Council		S. Wilson	Trade and Labour Hall	
ST. CATHARINES:				
Trades and Labour Council		Leo T. Coyle	3 Court Street	1st & 3rd Weds.
ST. THOMAS:				
Trades and Labour Council		Jas. D. Ballantine	39 Flora St.	
STRATFORD:				
Trades and Labour Council	1900	Fred. J. Todd	Box 329, Stratford.	2nd & 4th Frids.
TORONTO:				
Toronto District Labour Council	1881	Jas. Stevenson ...	Labour Temple ..	1st & 3rd Thurs.
Allied Printing Trades Council		W. A. Vickery	51 Alexander St. ..	2nd Tuesday.
Building Trades Council ..	1905	A. J. Porter	113 Euclid Ave. ...	2nd & 4th Monds.
United Brotherhood Carpenters and Joiners District Council		M. C. Clark	Labour Temple ...	2nd & 4th Monds
Managing Committee Amalgamated Society Carpenters and Joiners		Geo. Thomson	223 Lippincott St. ..	Alternate Weds.
Painters' District Council..		J. G. Fitze	15 Clark St.	4th Friday.
Garment Workers' Council.		U. Corry.....	4 Monteith St. ...	

 DIRECTORY OF CENTRAL LABOUR ORGANIZATIONS IN ONTARIO —*Continued.*

Name of Organization.	Date Organized.	Name of Secretary.	Secretary's Address.	Nights of Meeting.
TORONTO.—<i>Con.</i>				
Theatrical Council		W. D. Shank	49 Edwin Ave.....	
Metal Trades Council		Jos. M. Helliker ..	191 Bolton Ave. ..	Last Tuesday.
International Association				
Machinists' Council		H. Bryson	275 Arthur St.....	
Iron Moulders' Board of				
Conference		J. H. Barnett	19 Roylat St.....	
WINDSOB:				
Trades and Labour Council		F. J. Hughes	c-o Standard Print- ing Co.	1st & 3rd Weds.

ONTARIO INDUSTRIAL STATISTICS.

It is slow work persuading the manufacturers of the Province to fill in and return the schedules that are sent to them for the purpose of obtaining information as to our industrial progress, but still there is a continual increase year by year of these, and there seems to be a growing conviction that the statistics thus obtained are treated as absolutely confidential so far as the identity of the firms and companies is concerned. Out of the 679 returns that have been received 52 do not give sufficient material for tabulation in our second series, so that these tables contain 707 establishments as compared with 642 last year, and 610, 536, 384, and 153, in the four previous years. These tables show that 51,095 persons were employed, with aggregate wages amounting to \$23,361,134, and product to \$122,726,571; that the aggregate number of days in operation was 202,326, the average annual wages was \$467.80, and the average daily wage was \$1.64. The whole of the industrial statistics show continued progress.

RETURNS IN DETAIL

LUMBER MANUFACTURERS,

Office No.	Capital employed, including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
1	\$ 500,000	350	\$ 515,000	no	no	\$ 1,500	\$ 5,200			250	
2	150,000	83	80,000	yes	yes	651	3,154			85	
3	50,000	175	88,000	no	no	560	900			40	
4	175,016	300		yes		720	1,389	5,500		40	
5	100,000	150	50,000		.60	175	2,400			150	
6	125,000	110	60,000		10	271	2,203			150	
7	50,000	170	40,000	no	no	200	200			40	
8	445,000	100	135,000		35	260	4,820	3,500	32,000	290	
9	152,632	300	65,000	no	no	416	708		25,000	45	
10	12,000	65	9,000	no	no				7,000	14	
11	64,000	250	40,000	10		105	400	1,100	2,000	80	
12	1,500	45	280	no	no	12				1	
13	940,902	143	370,381		5	1,094	11,745	1,103	270,529	248	
14	17,000	225	14,980	15		37	259	600		11	
15		50			yes	10					
16	200,000	175	400,000	no	no	1,200	15,000			125	
17		279	600,398			1,750	9,143			169	
18	4,000	150	2,000		20	28				3	
19	2,000,000	190	1,000,000	no	no		25,000	10,000		1,300	
20	130,000	185	114,859	30		103	1,004			40	
21		300				15				5	
22	325,000	164	322,000	2		455	6,000	42,818		120	
23	2,000	100	500		25	20	51			3	
24	1,000,000	160	750,000	no	no	2,000	16,000	30,000	500,000	450	
25	20,000	125	25,000	5		185	300	350		10	
26	500,000	300	480,000	20		900	20,000		150,000	600	
27	5,000	200	6,000		10	34				5	
28	200,000	110	172,000		20	96	6,936	7,000	142,000	116	
29		300								50	
30	30,000	312	10,000	no	no	200		1,000		15	
31	60,000	123	112,000			200	2,175			71	
32		90	4,000	yes		21	70			12	
33	25,000	300	200,000			150	480			15	
34	3,000	30	1,000	no	no	30				8	
35	50,000	150	30,000	no	no	412	1,367	1,000	1,500	20	
36	50,000	150	20,000			240	150			20	
37	15,000	182	21,000			132	220	400	300	26	
38	22,500	150	25,000	no	no		150		1,500	30	
39	100,000	310	216,427	6		312	792	2,900	1,260	56	
40	15,000	225	13,000	no	no	90	110	1,200		8	
41	10,000	100	20,000		30	45	125	200	600	25	
42	2,000	200	15,000	no	no					4	
43	30,000	100	7,000		25	115	620			10	
44	150,000	200	100,000	no	no	200	2,000	1,500		50	
45		313				350	300			40	
46	120,000	307	95,000	25		1,171	462	2,000	1,500	37	
47	475,000	294	500,000			5,340	10,756	13,500	9,700	543	
48		300	103,156			631	1,036			50	
49	202,000	300	225,000	no	no	656	7,300	2,300		220	
50	1,500,000	150	375,000		5	10,816	18,276		10,000	200	
51	10,000	300	30,000	no	no	105	207	350	1,050	7	
52	300,000	307	175,000	no	no	700	21,000	2,000		290	
53	500,000	180	400,000	no	no	400	8,000	5,000		300	
54	200,000	250	150,000	no	no	450	2,000			65	
55	17,800	292	45,000	no	no	149	455			7	
56	130,000	182	90,000	no	no	525	1,700			50	

RETURNS IN DETAIL
PLANING MILLS, SASH AND DOOR

Office No.	Capital employed, including plant.	No. of days in opera- tion during 1910.	Gross value of products manufac- tured during year.	Produc- tion during year.		Taxes paid during year.	Insurance paid dur- ing year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
	\$		\$	%	%	\$	\$	\$	\$		
57	250,000	300	400,000	33 $\frac{1}{3}$	.....	200	1,600	.....	2,500	100	.....
58	150,000	313	145,534	16	.....	1,586	4,220	5,000	12,333	100	.....
59	20,000	200	30,000	.....	yes	430	250	.....	.....	19	.....
60	9,345	300	39,700	.....	.....	235	135	.....	350	11	.....
61	110,000	300	95,000	5	.....	375	1,600	10,000	1,000	45	.....
62	200,000	300	300,000	10	.....	1,113	3,000	2,000	30,000	55	.....
63	5,000	150	2,500	.....	25	.....	.....	.....	.....	3	.....
64	60,000	305	392,610	14	.....	397	4,834	.....	5,000	60	.....
65	75,000	300	140,000	25	.....	320	2,102	.....	1,000	55	.....
66	5,000	156	4,200	5	.....	65	.....	.....	.....	7	.....
67	110,000	300	320,000	yes	.....	500	1,125	2,000	.....	25	.....
68	50,000	300	45,000	9	.....	1,200	350	1,500	300	45	.....
69	13,500	245	.....	yes	.....	18	.....	400	.....	10	.....
70	40,700	280	50,000	no	no	210	500	1,000	200	40	.....
71	70,000	300	50,000	no	no	250	.....	.....	.....	25	.....
72	30,000	300	25,000	20	.....	140	330	800	.....	9	.....
73	60,000	310	75,000	20	.....	410	700	1,479	1,646	50	.....
74	4,913	33	1,072	.....	.....	54	.....	.....	105	3	.....
75	100,000	308	186,000	18	.....	.....	.....	7,100	.....	55	.....
76	150,000	300	300,000	10	.....	800	4,500	10,000	5,000	115	.....
77	6,000	280	11,000	.....	10	46	.....	.....	.....	2	.....
78	75,000	240	62,000	no	no	.....	525	13,000	.....	53	.....
79	50,000	310	42,000	no	no	143	672	1,223	2,295	30	.....
80	100,000	150	175,000	no	no	273	2,656	.....	.....	40	.....
81	20,000	300	42,000	5	.....	180	250	200	.....	12	.....
82	10,000	300	20,000	20	.....	44	300	.....	.....	12	.....
83	14,000	280	.....	.....	10	35	64	200	.....	3	.....
84	150,000	300	180,000	10	.....	500	1,000	.....	.....	40	.....
85	100,000	300	100,000	no	no	280	600	2,134	.....	50	.....
86	290,000	300	300,000	25	.....	1,600	3,050	.....	5,000	125	.....
87	120,000	298	85,910	31	.....	784	2,090	6,602	24,828	46	.....
88	8,000	270	.....	.....	.....	50	60	.....	.....	5	.....
89	60,000	300	105,000	no	no	375	600	10,000	.....	50	.....
90	65,000	300	125,410	20	.....	500	1,579	.....	.....	65	.....
91	50,000	305	150,000	10	.....	711	405	.....	.....	12	.....
92	20,000	305	75,000	yes	.....	190	400	.....	.....	35	.....
93	130,000	301	150,000	10	.....	.....	2,180	.....	.....	62	.....
94	75,000	300	39,000	15	.....	42	780	2,000	.....	65	.....
95	52,000	285	36,500	15	.....	65	512	2,200	20,000	14	.....
96	7,000	300	10,000	20	.....	123	75	.....	.....	6	.....

WOODWORKING FACTORIES, SPECIALTIES

97	340,000	165	1,120,000	.....	8	4,680	9,400	.....	52,503	455	.....
98	28,000	330	7,257	20	.....	166	742	.....	914	45	.....
99	50,000	300	200,000	10	.....	298	2,819	.....	.....	93	.....
100	10,000	300	18,500	.....	15	57	120	500	.....	11	.....
101	80,200	300	50,488	20	.....	253	1,077	22,651	9,862	25	10
102	210,280	300	182,000	yes	.....	640	1,200	6,000	5,776	150	6
103	8,900	300	15,000	15	.....	112	125	3,000	.....	15	.....
104	200,000	275	250,000	.....	.....	500	250	.....	.....	20	60
105	15,000	300	10,000	12 $\frac{1}{2}$	.....	125	250	5,000	.....	14	.....
106	15,000	250	25,000	.....	.....	150	120	300	.....	15	.....
107	2,036	305	5,025	25	.....	4	20	213	779	11	.....

FROM MANUFACTURERS.

FACTORIES, ETC.—TABLE NO. 2.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.			Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.		
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$						
41,000		16 50	10 50			9	6	10,000	yes					57
44,392		16 50	10 50			3	1	3,974	5			5	5	58
7,000			10 00			1	1	1,250	yes					59
4,980		19 50	10 80			1		800	no	no				60
23,000		18 00	8 25			3	1	4,000	5			5	5	61
34,500		15 60	10 00			9	3	9,600	10			10	5	62
400			9 00						10			10		63
30,906		18 00	9 00			4	3	4,269	no	no				64
25,500		20 25	10 00			3		3,200	5			5	5	65
1,390			7 50											66
10,000		15 00	9 00			4		3,000	no	no				67
24,000		15 00	8 25				1	2,800	4			4	4	68
3,000		12 00	average						yes					69
16,018		14 25	9 75											70
12,000		14 00	7 80						no	no				71
4,500		15 00	8 50			1	1	1,650	yes					72
34,338		18 75	12 00			5	1	5,627	10			10	10	73
198		12 00	average						no	no				74
22,000		15 75	9 00			3		5,100	no	no				75
54,000		16 50	9 75			4		4,200	5			5	5	76
500		12 00	average						yes					77
31,500		17 25	12 15			4		3,300	no	no				78
9,521		13 50	8 70			3		1,623	no	no				79
30,000		21 00	12 00			5	1	8,000	no	no				80
5,100		13 50	9 75			1		1,200	no	no				81
25,000		13 50	8 40						10					82
1,400		10 50	7 50			1		700	no	no				83
26,000		18 00	10 80			3	1	5,000	7½			7½		84
20,000		12 00	7 50			2		1,700	5			5		85
75,000		21 00	12 00			8	1	12,000	yes					86
27,240		18 00	9 75			6	2	9,140						87
3,000		15 00	10 50											88
22,000		13 50	10 20			2	1	3,000						89
23,003		15 00	8 25			1	1	1,200	5			skilled		90
8,910		15 00	average			1	1	1,624	yes					91
16,000		9 14	average											92
32,000		19 50	12 00			4	1	5,000						93
18,000		13 50	9 50			3		2,080	10			10	10	94
5,882		15 00	6 00			2	1	3,356	10			skilled		95
2,500		13 50	9 00						10					96

IN WOODEN WARE.—TABLE NO. 3.

490,482	.....	18 00	10 50	.....	.....	6	3	14,161	2½	.....	2½	.....	97
14,654	.....	9 00	average	.....	.....	3	1	3,964	.....	.....	.....	.....	98
47,800	.....	19 50	10 80	.....	.....	5	.....	4,800	10	.....	10	.....	99
6,997	.....	12 00	average	.....	.....	.....	.....	.....	no	no	.....	.....	100
11,746	2.936	13 50	7 50	6 50	4 00	3	.....	5,520	no	no	.....	.....	101
53,029	1,800	16 50	7 50	9 00	6 00	5	.....	7,800	no	no	.....	.....	102
6,000	.....	14 00	8 00	.....	.....	.....	.....	.....	no	no	.....	.....	103
40,000	both	11 00	average	for	all	12	4	.....	.....	.....	.....	.....	104
4,500	.....	12 00	average	.....	.....	2	.....	1,500	yes	.....	.....	.....	105
5,000	.....	12 00	9 00	.....	.....	1	.....	.....	.....	.....	.....	.....	106
2,827	.....	19 50	4 50	.....	.....	.....	1	130	8	.....	8	.....	107

RETURNS IN DETAIL

WOODWORKING FACTORIES, SPECIALTIES

Office No.	Capital employed, including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
108	\$ 28,000	100	\$ 5,000	no	no	\$ 100	\$ 325			16	
109	15,000	300	15,500	15		150	160			12	
110	25,000	301	32,000	5		59	488	500		45	
111	23,000	275	45,000			35	600	1,600		45	5
112	10,000	225	7,600	25		3,000	3,000	900		15	
113	400,000	300	260,000	20		1,200	1,100	2,000	8,000	130	20
114	75,000	300	80,000	10		1,400	200			50	
115	26,000	277	66,000	25		290	335			30	
116	25,000	300	55,000	13		97	294	4,100	1,000	13	13
117	20,000	300	40,000			241	550	2,000		34	1
118	30,000	360	75,000	15		275	1,200	1,000	10,000	40	
119	80,000	305	140,000	10		364	1,040			60	
120	30,000	250	35,000	no	no	124	330		1,000	20	
121	25,000	305	12,000	yes		132	235			12	
122	59,087	313	78,752	10		104	1,188	523	1,366	40	
123	75,000	305	70,000	9		400	1,400	10,500	7,000	68	
124	55,000	250	76,000	no	no	370	1,900	25,000		100	15
125	60,000	300	125,000	10			360	12,000		22	
126	100,000	300	200,000	20		1,000	850			65	35
127	20,000	300	110,000	43		40	255	1,978		30	5
128	50,000	200	20,000	no	no	200	1,250	15,000		35	
129	14,000	310	7,000			100	50			7	1
130	20,000	250	37,500	no	no	54	496			24	
131	100,444	300	60,472	16		23	195	1,051	34,976	20	
132	10,000	300	24,500	no	no	18	45			3	

FURNITURE MANUFACTURERS; BANK, STORE

133	110,000	300	50,000	25		350	200		120,000	40	
134	500,000	300	535,000	13		1,496	3,298		25,000	70	
135	150,000	300	175,000	20		550	600			110	
136	47,473	298	66,341	20		436	618		7,841	35	
137	62,500	300	60,000	20		101	259	800	21,889	37	1
138	40,205	300	38,000	2		120	762		19,047	35	
139	1,500	290	3,000	no	no	13	44	25	75	2	
140	60,000	300	75,000	20		190	1,600			40	2
141	75,000	300	115,000	20		400	400		69,000	70	
142	12,000	230	14,000			64	175	700	1,900	23	
143	53,000	300	50,000	45		66	546	500	6,500	44	
144	50,000	300	30,000	no	no	120	630			28	
145	3,000	312	75,000	yes		99	56	291		5	
146	400,000	302	305,000	17		331	5,000	10,000	5,500	250	30
147			113,000			948	2,024			50	
148	231,456	300	174,000	27		797	2,250	2,000	27,882	90	
149	130,000	300	140,000	yes		365	340	3,500		108	
150	75,000	300	60,000	no	no	600	1,800			50	
151	62,500	290	83,500	20		113	1,440		4,055	52	
152	55,000	300	77,000	22		140	1,800	8,000		50	
153	40,000	300	60,000	5		92	700	3,000		50	
154	150,000	300	100,000	30		253	203	2,000		55	
155	105,000	300	90,000	20		285	2,600			75	1
156	100,000	300	100,000	no	no	375	1,200		9,000	75	
157	162,500	295	210,132	30		498	665			126	3
158	90,000	300	75,000	10		122	2,488	2,500	1,000		

FROM MANUFACTURERS.

IN WOODENWARE.—TABLE NO. 3.—Continued.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
5,800		18 00	8 40			2	1	980	10			10	108
5,500		15 00	9 00			1		1,100	10		10		109
14,511		6 60	average						10				110
18,000							1		yes		yes		111
4,000		12 00	7 50						no	no			112
50,324	6,050	12 00	9 00	9 00	6 00	10	8	7,500	5		3	5	113
20,000		18 00	9 00			1		1,000	5		5	5	114
14,000		13 50	8 00			1		1,000					115
5,103	3,120	13 00	9 00		5 00	2		3,940	10		10	10	116
22,500	350	15 00	6 00			1	1	1,500					117
14,000		13 50	8 50			2	1	2,400	yes				118
22,000		12 75	9 75			2		4,200	10				119
7,800		15 00	9 00			2		2,000	no	no			120
8,561		15 75	10 50			1		800	no	no			121
18,000		10 50	average			2		2,800	4		4	4	122
35,000		16 50	9 45			3	1	4,000	10		skilled		123
35,000	both	16 50	9 00	9 00	6 00	1	1	700	10		skilled		124
13,003		15 00	13 50			3		2,500	no	no			125
25,600	10,000	15 00	9 50	7 00	4 00	10	5	5,000	7½		7½	7½	126
11,346	1,200	7 50	average	5 00	aver.	5		4,200	no	no			127
7,000		21 50	9 00			3		1,920					128
2,645	150	8 00	average		3 00								129
9,449		12 00	average						no	no			130
7,745		7 75	average			1	1	1,890	10		10	10	131
1,560		13 50	9 00			1	1	2,112	no	no			132

AND OFFICE FITTINGS.—TABLE NO. 4.

20,000		13 50	6 75			3	1	4,600	10		10			133
40,852		16 20	10 20			14	1	13,800	13		13		2	134
45,000		13 50	9 00			3	3	5,500	10		10	10		135
16,895		15 00	6 60			1		1,000	11		7½	11		136
15,242	250	10 50	8 40			1	1	1,950	5		5	5		137
12,918		10 50	9 00			2	1	2,300	10		10			138
850		16 50							no	no				139
18,000	600	13 50	10 50	12 00		2	2		10		skilled			140
26,500		12 00	8 40			3		10,000	10		10	10		141
6,956		10 38	average			1		750						142
21,263		12 45	8 25			2		2,000	10		10			143
12,000		12 00	9 00			1	1	1,650	10		10	10		144
3,040		12 00					1	312	yes					145
140,000	8,600	19 20	10 50	6 60	3 60	15	7	12,500	5		5	5		146
		13 50	10 50											147
45,919		12 00	average			3	1	5,020	10		10			148
38,981		14 50	9 75			3	3	4,500	yes					149
25,000		12 60	9 60			4		5,000	5		5	5		150
19,438		12 00	6 00			3	2	6,600	5		5	5		151
24,200		16 50	10 50			2		1,600	yes					152
24,000		13 50	9 00			2		1,850	5		5			153
22,000		12 75	8 25			3	1	3,300	10		10	10		154
30,000	300	12 00	8 25	6 00		2	1	3,000	10		10	10		155
35,000		12 00	9 00				2	2,000	yes					156
59,483	580	9 72	6 90		5 00	5	3	4,707	3		3	3		157
21,122		10 60	8 40			1	1	1,500	10		10	10		158

RETURNS IN DETAIL

FURNITURE MANUFACTURERS; BANK, STORE

Office No.	Capital employed, including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
159	100,000	310	\$	%	%	\$	\$	\$	\$		
160	60,000	300	63,024	no	no	298	750	2,134		50	
161	18,500	305	47,600	no	no	721	3,445		1,598	35	5
162	25,000	300	16,000	10		238	318		1,429	10	5
163	175,000	300	150,000	no	no	210	150			8	2
164	300,000	290	350,000	25		1,149	1,697			80	16
165	80,000	300	150,000	25		744	709	25,000	50,100	300	
166	69,200	308	91,854	9		400	1,000			50	5
167	30,000	300	67,000	12		300	2,318		500	85	
168	16,600	300	32,749	no	no	120	413		37,859	48	
169	67,890	300	52,000	2		49	285			21	1
170	160,000	300	205,000	14		106	1,100	5,000	2,011	45	
171	250,000	300	275,000	30		822	1,324	1,506		126	1
						758	2,000	500		125	2

CARRIAGES AND OTHER VEHICLES AND PARTS

172	109,200	300	136,000	no	no	1,296	2,000			60	3
173	175,000	313	125,000	no	no		6,000	3,000		70	
174	50,000	310	64,089			120	758	2,000	6,439	20	1
175	166,000	300	230,000	30		1,856	3,938		40,773	87	3
176	40,000	300	20,000	100		200	125		200	10	
177	200,000	300	750,000	12		500	2,587	43,617		390	10
178	103,615		223,725	29½		534	1,689	718	9,285	110	5
179	265,556	313	126,705	23½		233	730	8,130		50	
180	100,000	275				200	300	4,000	1,000	50	1
181	300,000	213	325,000	17		700	774	52,000		250	4
182	207,500	310	365,000	20		247	5,807	2,752	245,153	175	4
183	77,345	310	24,000	no	no	455	170			9	
184	150,000	300	155,000	12½		600	1,400	10,000	95,000	55	
185	100,000	300	95,000	no	no	350	550	600	14,500	42	2
186	100,000	300	210,285		5	461	3,173			65	
187	400,000	300	740,885	96		766	4,752	22,188	64,250	90	
188	433,999	300	444,594	yes		670	3,114	11,118	14,574	150	
189	35,000	300	65,000	5		195	556		4,687	24	3
190	195,100	308	420,000	10		3,200	6,500	12,000		425	5
191	75,000	300	50,000	10		100	750	1,000	1,800	26	1
192	250,000	275	314,715	25		1,580	2,200	20,000	5,000	150	
193		300	35,000	no	no	75	500			16	1
194	2,000	305	62,500	yes		128	60			8	1
195	58,779	275	41,537		3	122	259	2,000	6,124	26	

AGRICULTURAL IMPLEMENTS, FARMING HAND

196	163,000	300	200,000	no	no					175	
197	300,000	300	300,000	no	no	800	900	10,000	5,000	150	
198	2,000,000	282	640,000	28		3,235	1,643	100,000		385	
199	3,000,000	300	2,000,000	no	no	461	2,315		1,877	115	2
200	42,500	300	26,000	15		32	376	2,000		18	
201	200,000	290	170,000	no	no	1,292	1,017			70	1
202	150,000	300	29,000	yes		156	806	500		35	
203	250,000	300	99,000		yes	125	1,400			50	
204	275,000	280	200,000	11		1,400	2,200		16,500	33	15
205	700,000	240	290,000	no	no	140	2,400		35,000	75	15
206	100,000	310	125,000			130	350	8,700		54	4
207	150,000	300	80,000	10		187	93			33	1
208	300,000	300	210,000							35	35
209	112,000	310	115,000		yes	550	875			70	1
210		300	125,000	yes		122	414	15,000		50	
211	18,000	300	36,474	18		102	436			20	
212	100,000	310	100,000	66			400	10,000		25	

FROM MANUFACTURERS.

AND OFFICE FITTINGS.—TABLE NO. 4.—Continued.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
20,000	.....	13 50	7 50	.....	.....	2	.....	1,600	10	.....	10	10	159
10,000	3,500	18 00	12 00	7 00	.....	9	.....	9,513	no	no	.....	.....	160
6,407	1,054	12 80	average	4 20	aver.	.....	.....	.....	no	no	.....	.....	161
2,500	600	12 00	7 50	6 00	.....	.....	.....	.....	10	.....	.....	.....	162
36,082	both	15 00	10 50	8 00	4 50	1	4	6,257	5	.....	5	5	163
96,000	.....	13 50	9 45	.....	.....	20	.....	29,950	10	.....	10	10	164
15,000	both	5 50	average	for	all	4	.....	.....	yes	.....	.....	.....	165
30,005	.....	12 00	9 60	.....	.....	4	1	4,650	5	.....	5	5	166
17,639	.....	10 50	8 40	.....	.....	1	1	1,600	5	.....	5	.....	167
8,829	113	13 50	9 00	.....	5 00	2	.....	1,200	no	no	.....	.....	168
16,825	.....	7 50	average	.....	.....	2	1	2,115	4	.....	.....	.....	169
61,266	290	14 10	9 00	6 00	.....	4	2	7,121	5	.....	5	5	170
100,000	1,000	18 00	12 00	.....	.....	25	5	25,000	5	.....	5	5	171

THEREOF AND MOTORS.—TABLE NO. 5.

21,000	900	15 00	7 50	.....	6 00	3	.....	4,000	.....	.....	.....	.....	172
25,000	.....	13 50	8 50	.....	.....	2	.....	1,400	10	.....	skilled	.....	173
8,550	416	8 40	average	8 15	.....	1	.....	2,000	no	no	.....	.....	174
44,195	both	16 50	10 50	7 20	4 20	9	3	13,200	25	.....	25	25	175
5,000	.....	12 00	9 00	.....	.....	1	.....	650	10	.....	10	.....	176
130,728	4,200	15 00	10 50	9 00	7 50	12	6	17,298	no	no	.....	.....	177
68,113	both	17 50	13 80	10 80	5 40	5	1	6,786	35	.....	35	12	178
31,623	.....	15 00	10 50	.....	.....	1	1	1,200	10	.....	10	.....	179
4,000	200	15 00	8 40	.....	6 00	4	1	3,000	no	no	.....	.....	180
73,800	1,200	18 00	9 00	.....	6 00	11	.....	20,000	no	no	.....	.....	181
58,163	780	13 50	9 00	.....	4 80	13	2	23,580	5	.....	5	5	182
5,330	.....	12 00	9 00	.....	.....	.....	.....	.....	.....	.....	.....	.....	183
21,000	.....	14 25	9 75	.....	.....	4	2	9,500	7½	.....	7½	7½	184
22,000	750	15 00	10 20	.....	6 00	1	2	2,500	3½	.....	3½	.....	185
23,934	.....	12 00	9 00	.....	.....	3	.....	3,100	5	.....	5	.....	186
41,620	.....	15 00	12 60	.....	.....	12	4	14,865	no	no	.....	.....	187
72,720	.....	9 70	average	.....	.....	9	1	13,984	yes	.....	.....	.....	188
10,258	1,000	16 50	10 50	7 62	6 00	6	1	4,000	10	.....	10	10	189
176,594	1,047	13 80	9 60	10 00	7 00	9	.....	.....	5	.....	5	5	190
12,000	250	9 23	average	.....	5 00	1	1	1,450	no	no	.....	.....	191
77,000	.....	19 50	9 75	.....	.....	4	1	8,000	no	no	.....	.....	192
6,500	400	10 50	8 25	8 00	.....	.....	1	400	no	no	.....	.....	193
4,512	300	12 60	9 00	.....	6 00	1	1	1,236	5	.....	5	.....	194
15,009	.....	17 25	11 25	.....	.....	3	.....	2,117	10	.....	10	10	195

TOOLS AND DAIRY MACHINERY.—TABLE NO. 6.

50,000	.....	27 00	9 00	.....	.....	6	.....	.....	10	.....	10	10	196
65,000	.....	16 50	10 50	.....	.....	6	10	12,000	no	no	.....	.....	197
168,822	.....	15 00	9 90	.....	.....	18	5	22,870	6	.....	6	.....	198
46,000	700	13 50	9 00	7 00	.....	6	2	7,000	7½	.....	7½	7½	199
4,686	.....	12 00	7 50	.....	.....	2	1	2,388	.....	.....	.....	.....	200
39,850	.....	15 00	9 75	.....	6 00	4	1	5,634	8	.....	8	.....	201
9,500	.....	12 00	9 00	.....	.....	1	1	1,200	.....	.....	.....	.....	202
14,000	.....	12 00	7 80	.....	.....	2	.....	1,000	yes	.....	.....	.....	203
13,900	4,200	15 00	9 00	6 60	4 50	2	4	6,200	10	.....	10	.....	204
26,000	4,000	15 00	9 60	6 00	.....	6	2	10,000	no	no	.....	.....	205
19,403	1,850	19 50	9 60	9 60	.....	10	4	8,500	17½	.....	17½	17½	206
13,400	300	15 00	11 25	6 00	.....	2	1	1,800	2½	.....	2½	.....	207
18,000	both	5 15	average	for	all	3	2	.....	.....	.....	.....	.....	208
35,000	540	15 00	9 60	10 00	.....	4	1	6,500	no	no	.....	.....	209
30,000	.....	12 00	average	.....	.....	.....	.....	.....	no	no	.....	.....	210
10,121	.....	15 00	10 80	.....	.....	2	1	2,680	10	.....	10	10	211
10,221	.....	8 00	average	.....	.....	1	4	5,000	10	.....	10	10	212

RETURNS IN DETAIL PIANO, ORGAN AND MUSICAL INSTRUMENT

Office No.	Capital employed, including plant.	No. of days in opera- tion during 1910.	Gross value of products manufac- tured during year.	Produc- tion during year.		Taxes paid during year.	Insurance paid dur- ing year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
	\$		\$	%	%	\$	\$	\$	\$		
213	100,000	306	176,106	33 ¹ / ₂	.....	253	3,720	469	.....	85	2
214	50,000	300	65,000	15	.....	280	420	.....	.....	27	1
215	.....	303	100,000	yes	.....	.....	40,500	2,000	2,000	60	.....
216	1,000	300	4,515	no	no	.....	17	.....	.....	2	.....
217	125,000	305	154,792	14	.....	736	345	.....	.....	85	8
218	216,851	300	199,000	30	.....	822	2,357	2,000	.....	110	2
219	100,000	300	63,531	.....	yes	414	614	.....	.....	30	.....

WOOD-PULP FACTORIES, PAPER MILLS, STATIONERY

220	100,000	300	50,000	.....	yes	400	240	.....	.....	15	.....
221	114,700	305	90,000	35	.....	225	480	5,400	.....	45	21
222	15,000	300	30,000	.....	.....	.....	.....	.....	.....	25	.....
223	300,000	275	600,476	yes	.....	1,305	1,165	3,140	39,014	128	53
224	10,000	300	30,000	no	no	33	150	.....	1,200	4	17
225	16,175	300	25,000	no	no	319	120	3,313	.....	4	15
226	12,000	300	30,000	no	no	63	175	350	.....	4	18
227	151,450	250	60,249	.....	.....	165	667	.....	27,696	18	.....
228	18,000	300	27,000	40	.....	80	160	3,000	.....	4	20
229	18,000	300	20,000	no	no	60	140	400	.....	8	.....
230	36,200	300	33,631	43	.....	114	386	1,200	7,759	14	9
231	3,500	290	5,500	15	.....	50	60	200	.....	2	6
232	17,000	300	.....	yes	.....	175	100	200	.....	7	7
233	25,000	300	35,000	12	.....	54	260	1,000	.....	12	9
234	2,000	300	4,373	6	.....	11	15	.....	.....	2	5
235	25,000	300	35,000	no	no	76	.....	.....	.....	13	2
236	175,000	304	216,445	12	.....	543	833	4,876	9,750	57	4
237	75,000	250	105,000	33	.....	450	550	7,000	1,500	15	35
238	25,000	300	131,000	60	.....	850	460	5,100	.....	25	80
239	452,602	300	277,120	.....	.....	99	849	126,580	180,926	72	25
240	3,500	300	23,000	no	no	25	15	.....	.....	10	.....
241	43,000	280	54,000	no	no	176	.....	1,200	.....	13	.....

FOUNDRIES AND ROLLING MILLS, BRIDGE AND STRUCTURAL

242	154,000	300	358,000	14 ¹ / ₂	.....	337	460	.....	69,200	140	.....
243	178,317	286	342,573	11	.....	284	1,658	.....	.....	145	.....
244	129,000	295	420,317	9	.....	1,575	1,693	.....	.....	150	.....
245	221,860	300	210,000	10	.....	900	300	15,000	1,000	120	.....
246	10,000	275	56,481	yes	.....	91	167	.....	.....	45	.....
247	48,000	294	60,551	32	.....	425	420	800	24,240	42	.....
248	6,000	280	4,000	15	.....	28	48	700	100	4	.....
249	20,000	300	25,000	25	.....	135	137	1,500	.....	20	.....
250	35,000	305	90,000	.....	.....	80	297	7,000	.....	40	.....
251	150,000	300	140,000	40	.....	300	.....	9,000	.....	60	.....
252	97,000	300	140,234	50	.....	595	1,194	6,709	22,298	128	.....
253	20,000	305	18,000	no	no	370	144	.....	.....	18	.....
254	579,181	307	536,248	15	.....	504	5,363	.....	.....	302	.....
255	60,000	300	300,000	.....	.....	1,685	835	.....	.....	130	.....
256	130,000	310	180,000	10	.....	66	365	11,000	5,000	25	.....
257	30,000	300	20,000	.....	.....	120	150	.....	.....	12	.....
258	99,862	300	170,814	7 ³ / ₈	.....	302	521	.....	.....	90	.....
259	20,000	305	8,000	3	.....	64	86	600	200	6	.....
260	151,997	340	787,780	50	.....	2,540	.....	370,000	.....	180	.....
261	10,000	150	25,000	no	no	.....	.....	.....	3,000	6	.....
262	17,000	312	16,000	no	no	310	150	4,500	.....	15	.....
263	1,260,000	225	197,265	no	no	700	1,473	.....	.....	100	.....

FROM MANUFACTURERS.

FACTORIES.—TABLE NO. 7.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
47,273	572	11 00	average	...	5 70	3	...	5,500	4 ¹ / ₈				213
16,000		18 00	9 00	...	6 00	3	1						214
27,000		9 00	average	...		3	...		yes				215
875		10 00	8 00										216
39,875	2,288	16 50	8 10		5 70	2	...	2,860	yes				217
55,717	520	15 00	9 00		5 00	3	2	6,500	no	no			218
14,660		15 00	8 00			2	1	3,300	yes				219

FACTORIES.—TABLE NO. 8.

8,624		11 57	average						no	no			220
86,740	7,360	16 00	5 00	9 00	5 00	22	5	20,400	10		10	10	221
4,500		20 00	9 00			1	1		30		30		222
65,219	10,910	21 00	6 75		4 80	11	1	15,142	yes				223
2,950	5,450	18 00		9 00		1	1	1,350	10		10		224
1,820	4,239	9 10	average	5 65	aver.	1	...	780	no	no			225
2,500	4,500	15 00	10 00	8 50	3 50	1	...		no	no			226
9,117		18 00	10 20			4	1	4,851	6		6		227
2,325	3,400	14 25	6 00	7 50	4 80	1	...	600	5		5		228
3,800			8 40										229
5,245	2,902	15 00	10 50	5 10	3 60	2	1	2,188	4		4		230
1,250	1,100	15 00	9 00	6 00	3 00				10		10	10	231
		16 50	10 50	5 75	3 25	1	1	1,400	10		10		232
5,000	2,000	13 50	7 50	7 50	6 25	2	2	3,600	no	no			233
825	1,500	13 00	3 50	5 50					yes				234
5,200	400	8 00	average		4 00	1	2	2,000	3		3		235
26,315	985	14 25	8 10	5 40	4 50	4	...	6,300	4 ¹ / ₂		skilled		236
7,000	5,000	11 40	average		3 50		2	1,500	25		25	25	237
12,500	24,000	12 00	8 00	9 00	5 00	3	3	4,000	10		10		238
37,884	5,003	14 25	9 50		4 50	5	1	10,897	5		5	10	239
6,000		12 00	average			1	...	1,000	no	no			240
7,800		20 00	10 50			2	...	2,400	no	no			241

IRON WORKS.—TABLE NO. 9.

85,056		12 15	average			2	2	6,936	no	no			242
71,191		10 20	average			5	1	3,895					243
36,741		11 80	average			6	...	5,182	no	no			244
65,261		18 00	11 00			14	3	9,396	no	no			245
24,702		17 40	11 00						no	no			246
30,250		20 25	11 25			3	1		2		2		247
2,800		15 00							25		skilled		248
9,000		15 00	7 50			2	...		10		skilled		249
19,818		15 00	10 50			6	1	8,800	no	no			250
40,000		30 00	12 00			3	1	6,000	no	no			251
77,630		15 30	9 00			10	1	11,542	5 ¹ / ₄		5 ¹ / ₄		252
5,778		15 00	8 00			2	...	1,350	no	no			253
157,864		10 25	average			7	1	7,519					254
68,000		12 00	average			5	...						255
12,000		15 00	12 00			2	2	4,800	10		10	10	256
6,250		10 50	average			1	1	1,400	10		10		257
70,134		16 50	9 00										258
2,600		9 00	6 00			2	...	800	no	no			259
124,680		18 00	9 00			17	...	18,800	no	no			260
3,000		18 00	12 00			1	...	700	no	no			261
7,500		14 00	10 50						no	no			262
75,600		20 00	average			3	1	11,600	no	no			263

RETURNS IN DETAIL

STOVE MANUFACTURERS, HOT AIR FURNACES

Office No.	Capital employed, including plant.	No. of days in opera- tion during 1910.	Gross value of products manufac- tured during year.	Produc- tion during year.		Taxes paid during year.	Insurance paid dur- ing year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
	\$		\$	%	%	\$	\$	\$	\$		
264	56,000	307	71,000	30	.....	140	290	7,000	.....	60	.....
265	848,729	286	901,316	25	.....	3,755	3,484	12,000	64,332	200	.....
266	25,000	300	56,018	8	.....	169	259	.....	3,621	30	.....
267	150,000	300	137,000	20	.....	1,725	1,775	.....	1,500	110	.....
268	20,000	250	11,000	230	.....	82	58	.....	.....	10	.....
269	25,000	300	55,000	30	.....	52	238	.....	12,000	10	.....
270	125,000	298	114,500	41	.....	958	1,200	21,257	.....	76	.....
271	160,000	275	273,000	70	.....	516	1,136	12,000	11,000	140	.....
272	40,000	300	90,000	yes	.....	100	12,000	.....	10,000	20	.....
273	26,000	250	95,009	23	.....	172	384	.....	2,462	34	.....
274	45,000	300	75,000	10	.....	400	1,000	2,000	.....	50	.....
275	.....	300	80,000	no	no	.....	475	.....	.....	50	.....
276	200,000	300	138,824	15	.....	360	1,200	2,005	15,782	90	.....
277	100,000	300	50,000	no	no	.....	.....	2,500	.....	50	.....
278	.....	260	48,000	24	.....	198	199	.....	980	22	.....
279	80,000	300	130,000	yes	.....	62	825	6,000	55,000	95	.....
280	350,000	290	275,000	10	.....	2,500	3,500	5,000	29,000	205	.....

ENGINES, BOILERS AND MACHINERY FACTORIES; ENGINEERS

281	240,000	308	265,000	10	.....	156	.....	.....	32,681	140	.....
282	3,000	331	20,000	50	.....	16	120	.....	960	5	.....
283	52,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
284	1,156,061	302	324,626	.....	yes	1,800	1,140	13,927	.....	191	.....
285	90,000	300	55,000	15	.....	133	439	6,000	17,500	30	.....
286	62,000	300	42,000	10	.....	470	375	.....	.....	37	.....
287	41,000	300	31,817	.....	.....	84	600	.....	.....	15	.....
288	25,000	300	38,000	25	.....	.....	250	.....	.....	18	.....
289	.....	312	600,000	50	.....	1,465	500	.....	.....	230	.....
290	657,500	280	625,000	20	.....	3,306	498	32,000	72,300	267	.....
291	100,000	300	192,000	15	.....	500	500	.....	.....	85	.....
292	40,000	300	46,500	20	.....	87	346	.....	.....	37	.....
293	1,000	300	5,000	.....	22½	28	21	.....	.....	3	.....
294	130,000	300	83,000	no	no	900	700	.....	5,000	40	.....
295	267,000	300	250,000	yes	.....	1,450	1,650	.....	.....	125	.....
296	40,000	310	30,000	5	.....	160	180	.....	.....	20	.....
297	15,000	300	15,000	.....	yes	159	20	.....	.....	8	.....
298	21,913	305	29,333	.....	37½	84	230	1,315	4,179	36	.....
299	12,000	300	18,000	12	.....	11	60	.....	.....	14	.....
300	40,000	300	45,000	10	.....	350	400	1,000	.....	25	.....
301	5,000	305	8,356	25	.....	.....	.....	600	.....	7	.....
302	40,000	300	60,000	10	.....	300	800	.....	.....	15	.....
303	11,000	300	11,000	no	no	231	116	.....	1,400	10	.....
304	60,000	300	65,513	16	.....	175	352	700	.....	50	.....
305	75,000	313	22,500	20	.....	69	182	.....	.....	6	.....
306	73,555	299	81,697	27½	.....	227	1,015	3,278	13,224	56	.....
307	80,000	300	20,000	.....	yes	300	140	.....	1,800	18	.....
308	10,000	312	.....	no	no	170	.....	.....	.....	4	.....
309	1,310,000	280	600,000	no	no	.....	.....	.....	.....	.....	.....
310	150,000	300	125,000	15	.....	215	500	.....	60,000	29	.....
311	3,000	300	20,000	no	no	24	350	1,000	.....	16	.....
312	.....	278	24,995	25	.....	.....	.....	.....	.....	75	.....
313	300	250	.....	.....	yes	.....	.....	.....	.....	2	.....
314	30,000	300	71,200	20	.....	410	185	2,140	.....	32	.....

FROM MANUFACTURERS.

AND HEATING APPARATUS.—TABLE NO. 10.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$		%		%	
21,403		15 00	9 00			5		3,860	20		20		264
50,022		5 50	average			26	10	43,023	7		7	7	265
15,568		13 50	9 00			2		2,026	10		10		266
62,000		11 27	average			11		8,507	no	no			267
4,369		18 00	8 25			2		825	8		8		268
4,659		12 60	average			2	1	4,677	16		16	11	269
43,874		11 70	average			4		3,945	no	no			270
65,160		15 00	9 60			12	3	12,500	no	no			271
20,000		20 00	average			5	1	6,000					272
14,903		16 50	8 25			1		1,200	no	no			273
30,000		16 50	9 00			2	1	3,000	5		5		274
29,000		11 60	average			3	1	3,200	no	no			275
48,837		18 00	12 00			2	2	1,700	yes				276
25,000		18 00	10 50			1	1	1,000	no	no			277
16,220		19 50	9 90			1	1	1,460	3		3		278
48,000		18 00	9 00			5	1	7,800	5		5		279
99,880		19 50	10 50			15	3	24,600	5		5	5	280

AND MACHINE SHOPS.—TABLE NO. 11.

74,016		15 00	9 60			10	2	10,780	5		5	5	281
2,154		16 50	5 10						10		10		282
97,046		15 90	9 60			35	8	28,829	no	no			283
14,693		13 80	9 75				3	1,200	5		5	5	284
20,800		15 75	10 20			1		600	7½		7½	7½	285
6,865		15 00	9 75			4		2,161	yes				286
6,000		18 00				2	1	4,000	10		10		287
145,000		19 50	12 00			34		45,000	no	no			288
191,000		18 00	11 40			42	11	48,000	5		5	5	289
30,000		15 00	9 00			4	2	4,250	no	no			290
11,672		13 50	9 00			3		3,800	no	no			291
3,000		20 00					1	400	8		8	8	292
20,000		13 50	9 30			1	1	900	no	no			293
72,000		22 50	10 50			9		12,000					294
11,000		13 50	8 40				1	200	5		5	5	295
3,697		16 50				3		2,700	yes				296
12,907		18 00	12 60			2	2	1,836					297
8,000		19 50	12 00						10		10		298
16,000		18 00	12 00			2		2,288	10		10		299
5,000		16 50	9 00						10		10		300
10,000		18 00	12 75			1	1	2,000	10		10		301
3,800		12 00	6 00						no	no			302
27,450		16 50	9 60			2	1	3,700	7		7	7	303
2,405		18 00	12 00			1	1	3,038	yes				304
17,600		6 30	average			3	4	6,212	4½		4½		305
8,000		16 68	average			1	1			yes			306
21,100		12 00	10 50						no	no			307
250,000						3	10		yes				308
17,923		18 00	9 00						10		10	10	309
5,000		7 50	average										310
33,734		9 00	average			5		2,200	22		22		311
1,200		18 00	9 75						no	no			312
18,200		16 50	12 00			3		3,120	10		10	10	313

RETURNS IN DETAIL

ENGINES, BOILERS AND MACHINERY FACTORIES; ENGINEERS

Office No.	Capital employed including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
315	\$ 4,500	300	\$ 3,500	%	%	\$ 25	\$ 17	\$	\$ 100	3	.....
316	35,700	300	21,400	no	no	121	284	.....	1,300	10	.....
317	30,000	300	35,000	no	no	200	80	.....	.....	6	.....
318	60,000	300	35,000	15	.....	312	246	1,800	2,800	17	.....
319	.....	200	.....	no	no	200	250	.....	500	4	.....
320	3,700	300	25,000	.....	.....	100	125	.....	.....	27	.....
321	65,000	300	34,700	10	.....	174	570	.....	.....	25	.....
322	600,000	300	.....	.....	.....	.....	.....	.....	.....	175	.....
323	50,000	295	75,000	15	.....	.....	125	.....	.....	33	.....
324	25,000	300	20,000	20	.....	100	100	1,000	.....	18	.....
325	.....	300	100,000	25	.....	200	350	60,000	.....	75	.....
326	1,000	300	.....	.....	.....	25	.....	.....	100	.....	.....
327	132,136	310	143,729	12½	.....	226	.....	2,000	.....	75	.....
328	36,000	300	36,712	.....	.....	236	50	.....	15,799	24	.....
329	60,000	276	60,000	.....	.....	62	651	.....	.....	27	10

METALLIC ROOFING, BOLTS AND NUTS AND

330	70,000	300	140,000	no	no	404	728	.....	.....	20	.....
331	84,919	300	129,892	50	.....	383	309	4,310	60,934	47	4
332	70,000	310	41,154	2½	.....	296	50	448	13,466	25	.....
333	54,250	300	31,251	.....	32	166	312	449	1,985	8	.....
334	.....	300	60,000	yes	.....	405	488	.....	.....	42	.....
335	14,500	300	10,000	no	no	75	293	200	.....	8	.....
336	20,000	300	76,715	20	.....	215	285	.....	.....	50	.....
337	7,000	300	8,000	.....	10	100	100	.....	.....	10	.....
338	108,000	300	40,000	20	.....	178	878	19,000	6,000	55	.....
339	4,000	300	5,500	no	no	40	15	.....	.....	5	.....
340	100,000	300	95,000	15	.....	262	295	.....	.....	15	.....
341	200,000	300	275,000	10	.....	388	3,500	20,000	.....	110	.....
342	176,400	300	.....	yes	.....	70	1,050	10,000	.....	30	.....
343	75,000	300	50,000	10	.....	250	1,200	.....	.....	39	5
344	5,000	300	15,000	yes	.....	40	25	.....	.....	6	.....
345	15,000	310	14,833	50	.....	72	62	1,352	1,264	5	.....
346	24,178	310	26,544	12	.....	47	38	.....	.....	6	.....
347	.....	300	50,000	20	.....	135	700	1,000	.....	40	5
348	95,109	310	.....	.....	.....	.....	200	.....	.....	24	6
349	330,000	300	59,767	9½	.....	2,500	1,200	20,060	.....	300	.....
350	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
351	60,000	306	210,000	60	.....	196	558	.....	16,657	93	.....
352	90,000	240	100,000	.....	.....	232	1,100	20,000	6,500	45	10

WIRE FENCE, WIRE ROPE AND

353	16,000	305	35,710	33	.....	33	66	.....	.....	30	.....
354	190,000	250	350,000	.....	5	90	780	.....	.....	75	.....
355	40,000	300	45,000	.....	.....	70	20	.....	.....	25	.....
356	50,000	300	172,207	15	.....	16	710	6,900	14,862	25	.....
357	4,500	300	7,000	no	no	188	.....	.....	.....	10	.....
358	25,000	300	50,000	20	.....	60	248	.....	.....	40	.....
359	150,000	210	250,000	no	no	300	350	2,000	10,000	30	.....
360	35,000	300	30,000	.....	yes	194	285	.....	.....	10	.....
361	65,000	300	75,000	20	.....	110	306	.....	.....	6	.....
362	578,000	300	600,000	no	no	2,962	6,384	32,500	.....	250	.....

FROM MANUFACTURERS.

AND MACHINE SHOPS.—TABLE NO. 11.—Continued.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
1,100		10 00	4 00						10		10		315
4,300		8 60	average			1	1	1,540		yes			316
5,000		19 50	13 50			1	1	2,000	no	no			317
10,907		18 00	10 50			3		2,100	10		10	10	318
2,500		13 50	9 00			1		900	no	no			319
12,000		13 50	10 50			1		312	5		5	5	320
8,470		15 00	9 00			2		4,000	no	no			321
92,000		10 50	average			8		13,300					322
15,000		9 10	average			2	1	2,400	yes				225
7,000		12 60	9 00			1		1,200	10		10		324
28,000		15 00	10 50			11		10,000	10				325
													326
37,394		12 00	9 00			6		3,021	no	no			327
14,945		16 50	10 50			3		2,220					328
10,635	1,506	12 10	9 00	5 40	3 90	3	1	4,260	10		10		329

LIGHT IRONWARE.—TABLE NO. 12.

12,500		16 50	10 50			3	3	5,500	no	no			330
23,478	1,186	22 50	10 50		6 00	2	1	4,146	no	no			331
11,921		15 00	average			2	1	2,895	no	no			332
2,717		18 00	10 50			4	1						333
19,000		22 80	11 40			5		3,100	no	no			334
4,500		12 60	average			1		250	6½		6½		335
27,000		21 00	12 00			1		780	7		7		336
3,000		14 10	9 00						10		10		337
22,000		24 00	5 40			2	1	4,800	10				338
3,000		16 00	12 00						no	no			339
7,528		10 00	average			3	3	4,348	5		5	5	340
60,000		10 90	average			10	4		20		10		341
15,000		10 00	average			2			10				342
18,536	both	18 00	9 00	4 50	3 60	12	6	2,400	6				343
2,600		9 00	average				1	180	yes				344
2,850		17 75	10 00			1	1	1,687	30		30		345
2,888		18 00	12 00			2		2,600	no	no			346
16,000	800	8 00	average		3 20	1	1	1,500					347
13,861	3,000	11 30	average	13 10	8 00	20		16,861	10		10	10	348
150,772		21 00	10 50			11	4	26,765	10		10	10	349
													350
45,677		20 10	8 60			5	3	8,900	10		10	10	351
13,200	2,300	12 50	7 50	8 00	4 50	4		5,000	10		10		352

WIRE CLOTH FACTORIES.—TABLE NO. 13.

9,645		6 75	average			3		1,880	no	no			353
32,000		16 50	11 25			9	1	10,800	5		5	5	354
12,000		18 00	12 00			4	1	4,700					355
9,920		16 50	9 90			4	3	6,192	no	no			356
4,000		16 50	9 00			1	1	850	no	no			357
10,839		13 50	9 60			2	1	4,000	10				358
14,000		16 50	9 00			5	3	10,000	no	no			359
2,500		5 00	average			1	1	1,968					360
3,200		12 00	average			2	1	2,800	no	no			361
138,456		11 07	average			9	7		15				362

RETURNS IN DETAIL

BRASS AND COPPERWARE FACTORIES AND

Office No.	Capital employed, including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
363	400,000	300	400,000	15	no	1,800	2,200			160	
364	10,000	300	25,000	yes		36	135			18	
365	400,000	300	400,000	15		1,800	2,200			160	
366	60,000	300	65,000	no	no	721	2,509	610	1,824	30	5
367	350,000	300	250,000	20		1,372	3,400	2,200		125	30
368	525,000	300	200,000	10		400	1,600		97,000	60	20
369		300	35,390		yes	137	250	700		24	2
370	60,000	300	94,000	16		153	1,000	4,370	100	40	5
371	405,376	300	359,866	8		2,953	4,658	3,500	12,196	160	
372	1,500	328	9,000	2		5	13	500	5,000	4	
373	110,000	150									
374		300	172,308		10					140	
375	3,701,956	364	8,516,774	10		33,852	12,335	360,907		1,604	
376	44,000	300	80,000	20		197	410	1,000		51	11
377	30,000	300	60,000	no	no	300	300			33	
378	100,000	300	13,940			65	115	3,543	1,312	10	
379	47,416	300	27,060		30	164	190	1,000	10,672	14	
380	10,000	286									

SILVER AND PLATEDWARE FACTORIES

381	216,167	300	149,360	10		458	1,125		55,345	77	3
382	60,219	300	157,237	55			537		96,701	22	11
383	8,000	300	5,500	no	no	106	31			5	2
384	25,000	300	45,000	10		150	150		500	25	4
385	269,228	300	173,302	8		904	1,293	10,099	13,549	90	5
386		300	381,244	22		643	835	3,045	5,600	122	38

WOOLLENS, COTTONS, LINENS AND

387	2,000,000	301	1,780,000	no	no	8,500	2,200	30,000		607	419
388	800,000	303	633,234		7	3,500	500	6,612		116	198
389	15,000	275	15,000	70		70	300	500		5	12
390	5,500	300	20,000	2		35	134			7	
391	125,000	275	260,000	20		1,800	1,400	28,000	7,700	84	90
392	1,500	240	14,850		25	136	76	100	210	60	20
393	75,000	300	70,000	no	no	500	500			21	15
394	12,500	305	6,000		yes	500	123	350	100	6	
395	150,000	300	105,000	7		500	1,000	5,000		35	25
396	10,000	275	12,000		10	89	300			35	5
397	10,000	225	11,000		25	52	65		50	50	25
398	350,000										
399	24,000	275	12,000		yes		280			15	15
400	4,000	200	4,000	no	no	60	40	200		7	
401	3,200	270	16,700	no	no	77	25		631		8
402	25,000	300	30,000	yes		85	150	300		7	8
403	20,000	260		yes		231		40		2	3
404	6,000	200	9,500	yes		60	80		7,000	20	2
405	7,000	270	2,000	no	no	90	60	50		2	
406	60,000	300	60,000	yes		225	800	3,000		24	2
407	20,000	250	19,500	yes		140				7	7
408	10,000	313	22,167	15		113	70			6	2
409		280	300,000	no	no	497	482			80	170
410	2,000	200	1,500	no	no	23					40
411	100,000	300	75,000	15				3,000	500	30	4
412	40,000	300	50,000	no	no	420	400	10,000		14	20
413		300	41,000			403	255			10	30
414	14,000	180	14,740	no	no	40	40	150		15	
415	50,000	290	35,000	10		50	300		20,250	7	25

FROM MANUFACTURERS.

PLUMBERS' SUPPLIES.—TABLE NO. 14.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
100,000		18 00	15 00			9	4	15,000	yes				363
10,000		18 00				1		8,000	yes		yes		364
100,000		18 00	15 00			9	4	15,000	yes				365
12,510	1,492	16 50	12 00	6 00		4	2	9,400	no	no			366
55,000	9,360	19 50	13 20	10 00	5 00	16	3	14,000	4		4	4	367
32,000	7,204	10 70	average	7 20	aver.	9	3	21,000	10				368
11,583	500	9 70	average		5 00	4		3,692					369
17,061	2,100	15 50	11 25	9 10	4 72	4	2	9,300	10		10	10	370
71,922		9 00	average			36	5	20,992					371
3,000		18 00	10 00						1		1		372
													373
63,793		21 00	12 75			5	1	5,700	15		15		374
1,029,212		21 75	10 80			116	12	147,128	yes				375
22,300	2,900	15 00	9 00		4 20	2	2	5,000	10				376
17,500		14 00	8 75						8½		8½	8½	377
6,599		18 75	9 75			6	2	6,922	5			5	378
10,794		21 00	12 00			2	1	2,228	no	no			379
													380

JEWELRY FACTORIES.—TABLE NO. 15.

43,162	1,035	33 00	10 00	6 00	4 50	3	1	4,920	yes				381
12,933	both	21 00	10 00	7 50	5 00	3	1	2,372	15		15	15	382
2,700	500	11 50	6 50		5 00				15				383
7,500	600	15 00	5 00		3 00	1	2	2,150	10		10	10	384
54,085	both	24 45	9 00		6 00	11	5	15,263					385
62,132	bote	16 00	9 00	7 00	4 00	6	8	11,517	13½		13½		386

YARNS.—TABLE NO. 16.

248,000	110,000	8 00	average	5 40	aver.	12	1	14,000	no	no			387
52,312	61,410	10 35	7 03	6 44	4 55	4		3,440	no	no			388
3,509	both	4 13	average	for	all	2	1	2,000	15		15	15	389
3,531		12 00	7 50						no	no			390
36,400	28,800	11 25	8 70	7 80	5 00	3	3	4,000	5		5		391
27,600	both	9 00	average	7 50	aver.				20				392
14,500	both	15 00	7 50	5 35	aver.	2		3,000	no	no			393
4,200		20 00	9 00			1		1,000	no	no			394
16,000	both	5 34	average	for	all				5		5	5	395
12,880	1,280	9 00	7 50	6 00		2	1	850	10		10	10	396
20,000	3,000	9 00	average	for	all	1		400	10		10	10	397
													398
7,000	3,500	10 50	average	5 25	aver.	1			yes				399
1,000		4 33	average						yes				400
	1,653			4 20	aver.				no	no			401
5,000	both	15 00	7 50	6 60	3 60	1			10		10		402
1,630	both	9 00	average	6 00	both				yes				403
6,650		10 50	average	7 50					yes				404
1,500		16 50							no	no			405
10,000		8 00	average			1			no	no			406
2,150	1,681	9 60	6 60	6 00	4 80				5		5		407
3,476	577	13 00	9 00		3 00	1			10				408
30,000	31,500	10 00	7 50	8 25	4 20	3		3,550	no	no			409
													410
8,100	1,500	12 00	9 00	9 00	6 00	2		3,000	yes				411
7,000	4,250	10 00	average	4 31	aver.	1		300	no	no			412
		16 00	7 00	7 50	4 00				yes				413
4,000		8 89	average						no	no			414
1,800	4,200	10 00	7 50	4 00	2 50	2		2,500					415

RETURNS IN DETAIL

KNITTED GOODS FACTORIES; MEN'S

Office No.	Capital employed including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
416	\$ 75,000	300	\$ 120,000	15	%	\$ 317	\$ 800	\$ 5,000		26	30
417	10,500	300	4,700	10	.....	21	358	824	.....	7	17
418	179,000	300	450,000	25	.....	475	300	21,000	.....	60	270
419	75,000	300	74,850	.....	yes	108	195	1,500	4,375	17	17
420	.....	300	300,000	no	no	1,250	.....	60,000	.....	150	175
421	65,000	300	85,000	20	.....	119	759	3,500	1,250	23	31
422	7,000	200	4,000	25	.....	28	90	.....	1,500	2	3
423	35,000	300	73,000	100	.....	198	259	30,000	234	6	15
424	8,000	300	10,000	.....	10	26	40	250	140	.....	3
425	80,200	312	157,350	25	.....	324	1,635	.....	.....	27	75
426	150,000	270	225,000	20	.....	1,200	110	6,000	.....	60	70
427	125,000	300	200,000	25	.....	300	600	30,000	.....	70	70
428	50,000	245	113,000	71	.....	465	597	5,249	1,094	24	115
429	25,600	300	25,000	.....	10	161	272	.....	.....	3	30
430	800,000	303	633,234	.....	7½	3,912	500	6,612	.....	116	198

CLOTHING FACTORIES, MEN'S AND WOMEN'S;

431	150,000	300	265,000	.....	yes	1,007	1,275	.....	.....	30	170
432	75,000	290	215,000	10	yes	242	525	.....	.....	31	152
433	20,000	275	8,000	½	.....	80	50	.....	.....	6	.....
434	46,000	275	175,000	no	no	233	700	500	.....	8	80
435	17,400	300	129,000	12	.....	104	1,091	.....	5,000	22	102
436	65,004	300	39,043	25	.....	163	337	.....	.....	12	50
437	40,000	300	55,000	20	.....	164	173	100	45,000	4	10
438	.....	312	.....	yes	.....	158	.....	.....	.....	.....	.....
439	.....	300	75,000	.....	.....	.....	200	.....	.....	10	45
440	25,000	300	100,000	25	.....	29	906	1,000	.....	10	50
441	40,000	300	104,000	12½	.....	131	600	1,778	14,679	27	35
442	12,000	260	38,000	20	.....	.....	.....	1,200	.....	5	10
443	70,000	300	308,000	13	.....	862	1,845	2,397	3,770	20	175
444	100,000	300	150,138	.....	3	200	2,292	.....	25,034	36	58
445	40,000	300	180,000	7	.....	110	65	500	.....	8	70

BOOT AND SHOE MANUFACTURERS,

446	500,000	275	800,000	90	.....	.....	1,300	5,000	60,000	140	100
447	93,354	300	117,681	12	.....	110	865	120	1,599	42	14
448	50,000	300	335,000	20	.....	736	1,095	.....	.....	110	48
449	48,000	300	77,000	10	.....	90	670	.....	.....	29	7
450	33,500	280	65,000	20	.....	71	275	2,750	.....	20	41
451	46,920	275	125,378	25	.....	144	194	1,434	3,115	43	18
452	75,000	300	216,000	no	no	108	1,083	3,000	.....	70	15
453	35,000	270	45,000	33½	.....	100	860	.....	4,000	18	8
454	3,000	300	7,000	no	no	26	30	.....	.....	3	1
455	40,000	150	60,000	no	no	60	200	.....	.....	40	20
456	.....	300	50,000	no	no	.....	.....	400	.....	25	15
457	1,000	300	2,300	25	.....	37	.....	.....	.....	2	1
458	.....	300	150,000	no	no	537	500	.....	.....	60	40
459	100,000	300	150,000	33½	.....	190	600	500	.....	50	25
460	50,000	300	60,000	.....	.....	225	700	.....	.....	25	1
461	126,700	300	261,858	7	.....	764	1,446	10,350	.....	81	46
462	35,000	300	325,000	80	.....	36	765	3,500	.....	95	20
463	210,000	277	211,000	20	.....	471	498	.....	.....	15	42
464	459,000	284	1,227,559	17	.....	1,134	7,299	23,664	72,853	214	162
465	50,000	285	85,000	10	.....	.....	850	.....	750	35	10

FROM MANUFACTURERS.

AND WOMEN'S UNDERWEAR.—TABLE NO. 17.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$ 11,700	\$ both	\$ 16 50	\$ 6 90	\$ 8 25	\$ 5 10	1	2	\$ 2,500	% no	% no	%	%	416
115,000	both	6 97	average	for	all	4	5	10,873	yes	no	10	10	417
11,246	both	6 61	average	for	all	4	5	10,873	no	no	10	10	418
85,000	both	24 00	10 50	9 60	4 50	1	1	1,800	15	no	15	8	419
4,500	13,500	19 00	7 35	6 90	4 95	1	1	1,800	8	no	8	8	420
600	both	9 00	6 00	9 00	4 50	2	1	3,200	no	no	no	no	421
3,140	6,020	15 00	9 00	10 50	8 00	2	1	3,200	no	no	no	no	422
600	both	21 00	9 00	10 50	5 50	3	3	6,500	yes	no	no	no	423
11,441	16,888	13 50	10 50	6 25	aver.	3	3	6,500	yes	no	10	10	424
43,000	both	15 00	7 50	9 00	6 00	2	1	2,750	10	no	10	10	425
25,000	15,000	7 00	average	8 00	3 25	6	...	6,330	no	no	no	no	426
6,891	23,539	13 34	average	3 50	...	4	...	3,440	no	no	no	no	427
2,000	5,233	10 35	7 03	6 44	4 56	4	...	3,440	no	no	no	no	428
52,000	61,410	...	...	...	...	...	...	...	...	...	...	...	429
...	...	...	...	...	...	...	...	...	...	...	...	...	430

W WHITEWEAR, MILLINERY, ETC.—TABLE NO. 18.

68,500	both	7 70	average	for	all	13	12	19,000	yes	...	...	...	431
52,300	both	11 00	average	7 25	aver.	4	3	1,900	no	no	...	...	432
3,000	...	13 50	...	...	...	1	...	300	...	...	...	...	433
4,500	25,000	13 00	6 00	9 00	6 00	10	...	8,700	10	...	10	10	434
11,232	21,326	10 20	average	4 18	aver.	6	5	15,200	no	no	...	...	435
7,200	11,309	18 00	9 00	8 75	4 50	2	1	2,934	no	no	...	...	436
2,752	2,950	30 00	9 00	6 00	3 00	2	...	1,916	10	...	10	10	437
...	...	...	...	...	...	5	3	...	yes	...	...	...	438
4,000	13,000	12 00	...	15 00	...	2	1	2,000	10	...	...	...	439
18,000	both	15 00	...	7 00	...	2	1	2,000	10	...	...	...	440
19,693	both	6 35	average	for	all	2	3	3,975	...	...	...	...	441
2,500	2,700	11 63	average	6 30	aver.	...	...	...	...	...	...	...	442
61,542	both	21 00	9 00	13 50	6 00	5	2	13,500	7	...	7	7	443
13,085	11,600	7 27	average	4 00	aver.	4	4	6,626	no	no	...	...	444
3,500	22,500	12 50	8 50	12 50	4 25	...	...	...	3	...	...	...	445

FELT FOOTWEAR.—TABLE NO. 19.

58,592	28,276	13 50	10 50	8 10	6 00	16	4	25,660	5	...	5	5	446
17,360	3,600	15 00	9 00	9 00	4 50	2	...	3,300	2	...	2	...	447
69,500	both	8 80	average	for	all	2	3	5,900	10	...	...	...	448
11,000	2,000	12 50	8 00	8 00	4 25	2	5	3,800	yes	...	...	...	449
8,690	10,260	19 50	9 00	9 00	4 50	3	2	4,212	no	no	...	...	450
15,269	6,490	7 75	average	for	all	5	1	8,000	10	...	10	...	451
32,330	5,000	16 50	7 50	14 25	5 25	3	...	2,500	5	...	5	...	452
9,200	2,100	12 00	9 60	6 00	4 50	1	...	1,000	10	...	10	...	453
1,500	250	10 00	average	...	5 00	1	1	1,200	no	no	...	...	454
8,000	4,000	24 00	8 50	11 50	4 50	1	1	1,200	...	...	...	...	455
15,000	both	7 50	average	for	all	...	...	...	no	no	...	...	456
500	100	7 50	...	...	2 00	...	...	...	no	no	...	...	457
30,000	20,000	12 00	8 00	9 00	5 00	5	2	8,000	no	no	...	...	458
20,000	5,000	8 00	average	4 00	aver.	8	4	10,000	no	no	...	...	459
9,000	350	10 50	7 50	6 00	...	3	...	2,500	no	no	...	...	460
54,900	17,550	13 56	average	7 63	aver.	9	1	7,996	6	...	6	6	461
32,000	2,500	13 50	7 50	7 50	4 50	3	1	3,300	...	...	...	...	462
17,352	both	6 62	average	for	all	3	1	3,750	yes	...	...	...	463
98,948	46,489	14 25	8 00	8 55	6 50	20	7	15,432	yes	...	...	...	464
13,000	2,500	10 50	7 00	7 00	3 00	...	...	...	5	...	skilled	...	465

RETURNS IN DETAIL

FUR MANUFACTURERS, DRESSERS AND DYERS;

Office No.	Capital employed including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
466	\$ 32,000	250	\$ 2,000	10	.....	\$ 230	\$ 300	.....	.....	10	30
467	110,000	300	210,000	25	.....	140	1,200	1,000	14,200	65	18
468	6,000	300	14,000	10	.....	.....	26	.....	.....	3	7
469	.....	300	5,000	10	.....	361	375	.....	.....	9	22
470	8,000	300	10,000	15	.....	25	36	.....	.....	5	2
471	50,000	300	143,000	25	.....	.....	1,700	.....	.....	90	35

TANNERIES, HARNESS AND LEATHER

472	830,000	305	746,000	no	no	988	2,186	3,500	25,600	115	.....
473	105,600	307	74,531	23	.....	422	1,150	.....	12,967	34	1
474	145,646	305	190,547	no	no	.....	1,520	4,393	.....	.....	.....
475	48,000	310	53,000	6	.....	360	329	.....	.....	21	.....
476	50,000	300	225,000	15	.....	443	1,600	.....	.....	45	.....
477	125,000	300	200,000	15	.....	650	450	.....	2,650	70	10
478	15,000	290	25,000	10	.....	250	75	300	.....	4	3
479	50,000	300	75,000	yes	.....	150	500	4,000	.....	20	45
480	.....	300	70,000	25	.....	660	500	10,000	.....	30	3
481	10,000	300	20,000	yes	.....	40	75	200	3,000	5	.....
482	60,000	300	.....	20	.....	.....	.....	.....	.....	25	3
483	12,000	300	25,000	no	no	100	350	.....	.....	4	.....
484	1,300,000	310	1,750,000	25	.....	1,600	5,600	30,000	.....	175	5
485	300,000	300	440,000	11	.....	987	500	10,000	.....	175	50
486	20,000	300	100,000	20	.....	300	400	800	2,000	30	40
487	11,556	300	47,035	10	.....	114	102	.....	1,160	13	21
488	75,282	300	122,484	10	.....	151	721	1,067	.....	22	.....
489	27,000	300	29,000	3	.....	50	180	7,000	.....	7	.....
490	55,000	300	6,694	10	.....	100	563	2,000	.....	14	.....
491	70,800	272	136,000	10	.....	370	910	1,300	100,000	22	.....
492	90,000	300	170,000	6	.....	425	800	900	.....	41	22
493	6,000	300	10,000	no	no	20	40	.....	.....	3	.....

FLOUR AND FEED MILLS; CEREAL

494	300,000	300	600,000	yes	.....	1,100	3,000	2,000	.....	50	2
495	30,000	290	35,000	no	no	158	438	300	.....	4	.....
496	.....	312	.....	.....	.....	350	300	.....	.....	40	.....
497	106,000	300	50,000	no	no	.....	.....	.....	.....	20	.....
498	75,000	312	365,000	10	.....	500	1,120	500	.....	17	2
499	35,000	307	150,000	10	.....	243	1,302	.....	.....	6	1
500	213,716	304	330,040	5	.....	524	1,187	1,248	7,868	30	15
501	35,000	307	122,000	8	.....	120	756	.....	.....	5	1
502	80,000	313	250,000	no	no	500	300	.....	.....	7	.....
503	35,000	306	46,408	.....	.....	196	108	.....	.....	5	.....
504	60,000	300	100,000	no	no	140	785	1,000	2,227	12	.....
505	10,000	300	.....	no	no	64	60	635	.....	4	.....
506	45,000	300	126,000	no	no	240	606	.....	3,914	7	.....
507	100,000	263	408,950	no	no	534	2,758	850	.....	30	.....
508	100,000	300	167,354	.....	.....	143	1,325	.....	110,000	56	12
509	70,000	300	240,000	no	no	500	500	.....	.....	7	.....
510	250,000	300	800,000	no	no	1,400	3,500	8,000	.....	20	2
511	1,500,000	295	5,269,788	yes	.....	224	10,290	207,237	98,598	225	212
512	43,459	300	364,107	no	no	106	1,802	2,400	2,000	15	1
513	25,000	305	220,000	no	no	140	275	.....	1,760	8	1
514	50,000	300	109,730	45	.....	644	1,039	.....	4,062	9	.....
515	70,000	300	100,000	no	no	581	773	.....	.....	5	.....

FROM MANUFACTURERS.

HAT AND CAP FACTORIES.—TABLE NO. 20.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
4,000	7,000	13 00	7 50	10 00	5 00	...	...	...	no	no	...	...	466
26,000	9,500	8 00	average	10 00	aver.	5	2	15,000	no	no	...	...	467
2,600	2,000	18 00	12 00	10 00	5 50	...	...	...	no	no	...	...	468
...	...	30 00	11 00	4 00	2 50	1	1	...	10	...	...	...	469
...	...	...	...	...	...	...	...	...	...	...	...	...	470
46,000	both	19 50	8 00	9 00	4 00	...	...	...	8	...	...	...	471

GOODS FACTORIES.—TABLE NO. 21.

54,620	...	9 30	average	...	...	2	1	2,072	no	no	...	...	472
20,417	416	14 10	9 00	8 40	...	3	1	4,500	no	no	...	...	473
10,861	...	...	...	...	...	3	...	...	no	no	...	...	474
14,000	...	13 07	average	...	...	5	2	4,447	5	...	5	5	475
23,600	...	10 50	average	...	...	1	...	1,000	4	...	4	...	476
28,000	3,000	12 50	8 00	7 50	5 00	6	2	10,000	15	...	20	...	477
2,200	900	13 50	9 00	7 50	6 00	2	...	1,500	15	...	15	...	478
24,000	both	12 00	8 25	7 50	...	...	...	...	yes	...	...	...	479
10,500	1,000	15 00	9 00	8 00	4 50	1	1	2,000	20	...	20	20	480
3,000	...	9 50	...	...	...	...	...	...	no	no	...	...	481
...	...	12 50	...	6 50	...	4	2	...	10	...	...	...	482
2,000	...	12 00	10 25	...	...	...	...	...	10	...	10	...	483
100,000	1,500	15 00	10 50	6 00	...	15	...	18,000	5	...	5	5	484
65,000	20,000	16 50	9 00	8 10	5 40	4	3	10,000	10	...	10	10	485
10,000	6,000	21 00	6 00	9 60	4 80	6	2	2,000	5	...	5	5	486
5,246	3,935	16 00	5 00	6 50	4 50	3	1	4,164	6	...	6	6	487
12,872	...	18 00	10 80	...	...	1	...	2,000	...	...	...	...	488
3,356	...	13 50	...	...	...	3	...	1,200	5	...	5	...	489
5,320	...	9 75	7 75	...	...	...	...	...	...	...	...	...	490
11,697	...	15 50	10 50	...	...	2	1	2,460	10	...	10	10	491
25,000	6,000	18 00	7 50	8 00	3 00	2	...	1,300	5	...	5	5	492
1,000	...	...	7 50	...	...	...	...	...	no	no	...	...	493

FOOD FACTORIES.—TABLE NO. 22.

25,000	800	15 00	10 80	6 67	...	5	...	...	yes	...	...	...	494
2,184	...	18 00	9 00	...	...	...	...	...	10	...	10	10	495
20,000	...	14 40	10 20	...	...	...	...	...	no	no	...	...	496
12,000	...	12 00	average	...	...	...	...	...	10	...	10	10	497
9,880	890	12 00	9 90	8 50	...	4	2	8,000	2	...	skilled	...	498
3,770	310	12 32	average	6 00	...	...	...	...	no	no	...	...	499
18,424	5,025	12 00	average	6 60	...	1	...	800	no	no	...	...	500
...	...	9 96	average	7 00	...	...	...	...	10	...	10	10	501
5,000	...	13 72	average	...	...	1	2	4,000	no	no	...	...	502
2,332	...	12 00	8 40	...	...	...	...	...	no	no	...	...	503
5,100	...	12 00	9 00	...	...	1	...	700	no	no	...	...	504
1,500	...	13 00	7 00	...	...	...	...	...	no	no	...	...	505
4,209	...	12 00	10 00	...	...	2	1	2,652	no	no	...	...	506
14,516	...	14 25	9 48	...	...	5	...	5,100	no	no	...	...	507
28,233	2,448	15 60	...	7 50	...	8	...	3,463	...	...	...	...	508
4,600	...	13 14	average	...	...	1	2	3,000	no	no	...	...	509
12,000	800	19 00	12 50	7 80	...	3	2	4,500	no	no	...	...	510
120,200	40,000	13 95	8 55	7 80	4 95	28	5	37,153	yes	...	...	...	511
6,600	750	18 00	10 00	15 00	...	1	...	4,000	...	...	...	...	512
3,625	305	12 00	10 50	6 00	...	2	1	2,360	10	...	10	10	513
4,832	...	13 05	9 75	...	...	2	...	2,700	17	...	...	17	514
2,950	...	15 00	10 00	...	...	2	...	1,260	yes	...	...	...	515

RETURNS IN DETAIL

FLOUR AND FEED MILLS; CEREAL

Office No.	Capital employed including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
	\$		\$	%	%	\$	\$	\$	\$		
516	20,000	312	32,000	no	no	127	180	2,000	.....	3	.....
517	29,000	280	95,000	.....	14	273	267	.....	539	6	.....
518	45,000	300	50,000	no	no	140	785	5,000	3,100	7	1
519	15,000	300	36,000	.....	1	96	186	240	1,273	6	.....
520	70,000	295	265,000	10	.....	560	800	2,000	11,500	19	.....
521	25,000	300	135,000	.....	yes	320	454	.....	.....	8	1
522	25,000	300	40,000	.....	20	140	250	.....	.....	4	.....
523	50,000	300	240,000	no	no	286	762	1,500	.....	12	1
524	35,000	300	70,000	no	no	200	550	.....	.....	5	.....
525	20,000	250	.....	no	no	25	44	.....	.....	2	.....
526	80,207	313	435,081	20	.....	305	970	.....	6,177	19	.....
527	35,000	312	.....	no	no	400	200	1,500	.....	7	.....
528	11,000	180	7,200	.....	4	19	195	120	403	3	.....
529	5,000	300	3,000	.....	30	70	184	150	130	1	.....
530	3,500	300	20,000	15	.....	37	34	.....	100	1	.....
531	.....	325	1,300,000	15	.....	1,800	3,200	.....	.....	36	4
532	100,000	300	247,940	46½	.....	115	538	11,135	16,000	24	10
533	10,000	300	40,000	no	no	185	.....	.....	.....	3	.....
534	15,000	295	40,000	no	no	35	300	.....	.....	4	.....
535	20,000	300	30,000	no	no	82	137	.....	225	3	.....
536	35,000	300	150,000	5	.....	350	850	2,500	2,000	14	2
537	12,000	300	35,000	no	no	36	250	850	.....	3	.....
538	25,000	275	75,000	.....	10	427	544	1,700	625	5	.....
539	10,000	300	.....	no	no	135	140	.....	.....	2	.....
540	5,000	300	.....	.....	.....	65	50	.....	.....	2	.....
541	12,000	300	.....	.....	.....	96	.....	.....	.....	5	.....
542	8,000	300	32,000	16	.....	40	105	.....	.....	1	.....
543	16,000	300	26,000	no	no	97	200	1,000	.....	3	.....
544	10,000	290	50,000	no	no	45	145	.....	1,100	2	.....
545	60,000	300	157,050	.....	15	437	723	530	850	18	.....
546	4,000	200	5,000	no	no	85	65	.....	.....	1	.....
547	14,000	313	25,000	no	no	242	144	.....	.....	3	.....
548	5,000	300	.....	.....	.....	48	54	150	.....	1	.....
549	25,000	300	60,000	yes	.....	190	300	.....	.....	3	.....
550	2,000	.....	.....	.....	.....	27	.....	200	.....	.....	.....
551	6,000	260	.....	yes	.....	33	30	300	25	1	.....
552	20,000	300	40,000	5	.....	100	160	600	200	3	.....
553	14,000	300	25,000	no	no	38	214	.....	.....	3	.....
554	18,000	316	50,000	.....	37½	216	400	5,500	2,650	3	.....
555	90,000	300	143,166	.....	33½	206	716	400	1,150	11	.....
556	20,000	200	50,000	.....	.....	250	370	.....	.....	5	.....
557	7,000	300	.....	no	no	30	70	.....	.....	.....	.....
558	3,000	213	1,600	no	no	35	72	.....	.....	3	.....
559	36,700	300	120,000	16	.....	122	458	36	21,846	4	8
560	26,000	300	69,352	.....	.....	150	300	1,000	.....	6	.....
561	3,500	200	40,000	.....	50	23	8	.....	100	7	.....
562	22,500	310	33,000	.....	39	240	565	366	427	6	1
563	25,000	300	75,000	5	.....	198	375	750	2,200	6	.....
564	65,000	295	188,000	no	no	350	230	.....	2,150	13	.....
565	6,000	290	.....	.....	yes	42	125	500	.....	1	.....
566	13,600	300	10,000	5	.....	.....	122	235	.....	2	.....
567	30,204	200	52,800	no	no	166	438	900	225	5	1
568	35,000	250	46,419	no	no	153	112	1,000	.....	7	.....

FROM MANUFACTURERS.

FOOD FACTORIES.—TABLE NO. 22.—Continued.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
2,000		12 70	average										516
6,285		14 00	9 25			3	1	2,150	yes				517
2,872	420	14 00	9 00	8 40					10		10		518
2,591		10 00	7 50						10 ½		10 ½		519
10,135		15 00	11 00			2		2,800	10		10		520
4,350	416	18 00	10 50	8 30		2		2,500					521
2,300		8 00	4 80						no	no			522
8,000	560	13 33	average	11 20		1	2	1,760	no	no			523
3,000		14 00	9 00						no	no			524
800		15 00	7 50			1		500	no	no			525
9,672		13 50	11 50			3	2	4,459	yes				526
3,406		9 40	average						no	no			527
650		10 80	9 00						no	no			528
600		12 00											529
360		7 20							no	no			530
26,000	both	12 00	average	for	all	13	4		no	no			531
14,329	both	12 00		6 00		18		12,003	yes				532
12,000		9 00							no	no			533
2,000		10 00											534
1,050		13 50	9 00										535
7,000	700	15 00	7 50	9 00	5 00	1	1	1,000	10		10		536
1,200		12 00	9 00										537
2,400		15 00	9 00			1	1	1,800					538
900		9 00											539
						1							540
400		7 50											541
1,350		10 40	7 00						no	no			542
600			6 25						no	no			543
5,250		13 50	10 50			3		3,000	no	no			544
306			9 00						no	no			545
1,550		11 50	4 00						8		8		546
500		9 00											547
1,700		12 00	9 00						10		10	10	548
													549
400		9 30							3		3		550
1,100		12 00	9 00						no	no			551
1,500		12 00	4 00						no	no			552
1,600		12 00	9 00						no	no			553
5,833		10 61	average			2	1	2,750	no	no			554
3,000		15 00	9 00										555
													556
													557
2,700	2,000	14 00	10 10	7 00	4 72	3		4,500	no	no			558
2,750		9 16	average			1	1	1,420	yes				559
1,050			4 30						10		10		560
3,800	400	12 00	9 00	8 00		1	1	1,600	no	no			561
3,300		12 50	9 50										562
11,436		12 90	10 00			3	1	3,500					563
350			7 30						no	no			564
480			7 50						10				565
2,496	640	15 13	average	12 80					15		15		566
2,800		12 00	7 95						no	no			567
													568

RETURNS IN DETAIL BAKERS, BREAD AND BISCUIT, AND

Office No.	Capital employed, including plant.	No. of days in opera- tion during 1910.	Gross value of products manufac- tured during year.	Production during year.		Taxes paid during year.	Insurance paid dur- ing year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
	\$		\$	%	%	\$	\$	\$	\$		
569	200,000	300	600,000	10	.....	1,000	1,200	75,100	.....	140	25
570	.....	300	700,000	.....	.....	3,400	1,600	.....	35,000	150	200
571	15,000	300	102,000	yes	.....	175	156	956	80,100	29	.....
572	46,915	300	199,163	no	no	862	534	10,000	.....	56	5
573	.....	300	250,000	20	.....	.....	1,075	.....	.....	40	45
574	5,000	300	20,000	20	.....	.....	35	200	.....	3	7
575	50,000	300	110,000	10	.....	139	474	1,500	10,876	25	45
576	.....	300	133,000	1	.....	.....	.....	5,000	.....	20	26
577	227,124	292	449,614	no	no	689	2,039	2,449	72,634	66	73
578	10,000	275	40,000	no	no	250	250	.....	.....	10	12
578a	38,490	300	159,865	no	no	439	301	472	121,515	48	3

CANNING, PORK PACKING AND BACON CURING

579	228,000	300	755,157	.....	2½	549	3,513	.....	.....	75	.....
580	100,000	310	1,000,000	15	.....	336	2,472	15,000	3,006	60	.....
581	175,000	310	1,250,000	no	no	1,450	3,000	.....	.....	110	.....
582	.....	313	1,300,000	no	no	1,863	2,500	2,000	.....	75	.....
583	50,000	90	35,000	.....	50	85	.....	.....	.....	25	40
584	.....	150	.....	.....	.....	224	.....	.....	.....	200	both
585	20,000	300	100,000	5	.....	.....	7,000	3,000	5,000	25	.....
586	18,000	365	10,000	10	.....	68	125	800	.....	5	.....
587	.....	110	.....	.....	.....	84	.....	.....	.....	25	40
588	102,694	130	107,728	.....	10	475	.....	.....	.....	40	70
589	100,000	210	225,000	5	.....	40	.....	300	.....	35	100
590	.....	150	100,000	.....	30	564	.....	1,500	.....	40	80
591	.....	120	25,000	.....	.....	84	.....	.....	.....	25	50
592	600,000	300	4,500,000	.....	11	2,118	5,741	50,000	64,000	209	.....
593	150,000	300	125,000	15	.....	375	850	3,500	25,000	50	125
594	30,000	160	50,000	10	.....	120	.....	1,000	25,000	15	60
595	450,000	310	1,750,000	4	.....	501	4,800	6,152	80,000	110	.....
596	527,960	300	889,554	30	.....	583	5,000	5,308	715,444	63	40
597	131,733	300	290,000	40	.....	365	897	6,305	3,191	33	12
598	92,296	160	58,860	34½	.....	90	600	.....	34,807	40	60

DAIRY PRODUCTS AND OTHER

599	30,000	300	112,528	10	.....	611	835	1,000	14,400	10	10
600	20,240	313	43,840	yes	.....	.....	97	.....	.....	4	.....
601	131,733	300	290,000	40	.....	365	897	6,304	5,191	33	12
602	7,600	300	51,182	no	no	43	185	1,442	50,600	4	1
603	33,653	300	29,890	28	.....	38	122	.....	9,737	5	5
604	10,000	300	33,829	10	.....	120	.....	.....	.....	4	.....
605	250,000	300	470,906	18½	.....	842	39	7,655	394,606	81	35
606	100,000	300	240,000	10	.....	900	410	10,000	.....	20	20
607	30,000	300	21,000	no	no	145	110	1,200	.....	15	.....
608	700,000	300	376,532	.....	.....	2,485	2,717	.....	.....	78	10
609	3,500	200	15,000	10	.....	8	17	75	.....	4	.....
610	10,000	75	3,000	no	no	42	88	100	.....	7	.....
611	28,750	300	90,000	5	.....	160	300	.....	.....	5	15
612	.....	300	.....	30	.....	.....	.....	10,000	.....	40	15
613	120,000	300	300,000	no	no	1,040	1,200	.....	.....	25	30
614	4,000	365	10,000	no	no	44	58	600	.....	4	1
615	9,000	300	28,400	5	.....	55	138	.....	.....	3	4
616	10,000	50	3,000	no	no	88	175	.....	125	7	.....
617	200,000	300	500,000	15	.....	2,800	2,000	15,000	3,000	45	90

FROM MANUFACTURERS.

CONFECTIONERS.—TABLE NO. 23.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
83,000	7,000	12 00	average	5 60	aver.	4	12	8,500	10	...	10	...	569
50,000	65,000	15 00		7 00	5 00	4	12	10,000					570
18,100	.....	12 50	average			2	2	3,000	no	no			571
37,026	both	12 14	average	for	all	4	5	5,800					572
20,736	both	4 90	average	for	all	11	3	10,435	5	...	5	5	573
1,500	1,500	20 00		5 50	9 00	5 00	.....	.....	10	.....	10	10	574
8,545	7,125	18 50		8 00	6 00	3 75	8	1	8,970	10	.....	10	575
8,529	4,849	12 00		6 00	7 50	4 50	5	2	11,000	1	.....	1	576
24,064	12,775	18 00		9 00	7 00	4 00	7	11	15,897	10	.....	10	577
10,000	2,000	21 74	average	3 62	aver.	.....	3	.....	10	.....	10	.....	578
31,568	1,300	13 15	average	8 67	aver.	1	3	2,800	no	no	.....	.....	578a

WORKS, ABATTOIRS, ETC.—TABLE NO. 24.

28,643		7 62	average			3	4	7,940	no	no			579
24,760		11 00		9 00		2	3	3,748	20	...	20		580
37,650		17 25		10 50		6	3	12,000	10	...	10	10	581
33,000		6 25		5 00		6		10,000					582
3,770	4,200	12 00		9 00	10 50	6 00	3	...	2,400				583
14,361	both	4 80	average	for	all	2	2	1,507					584
10,000		20 00		12 00		3	...	5,000	no	no			585
1,500		12 00		9 00		2	...	1,000	10	...	skilled		586
2,000	500	10 50		7 50					no	no			587
12,000	both	15 00		9 00	7 50	5 40	3	1	2,950	no	no		588
12,075	21,060	12 00		9 00	5 40	4 20	3	1	3,740	no	no		589
13,200	both	12 00		9 00	7 50	4 80	3	1	2,850	no	no		590
2,000	1,000	10 50		9 00	6 00		1	200					591
115,000		19 50		11 00		24	9	34,900	10	...	5	10	592
9,000	7,000	15 00		9 00	6 00	4 50	4	...	4,500	10	...	10	593
5,000	7,000	15 00		5 00	7 00	5 00	2	1	2,800	5	...	5	594
50,807		18 00		10 00			12	...	21,500	yes			595
44,368	29,739	12 00		9 00	6 75	5 40	8	3	11,516	yes			596
14,000	3,000	11 10		9 00	6 00		3	2	3,700	10	...		597
5,469	1,575	14 25		9 00	6 00	4 50	1	...	2,000	25	...	25	598

FOODS.—TABLE NO. 25.

4,700	3,000	15 00		7 50	5 00	3 00	2	2	4,370	5	...	5	5	599
1,846		9 00	average					1	500	yes				600
14,000	3,000	11 10		9 00	6 00		3	2	3,700	10	...			601
790	100	12 00			6 00		1	...	125	15	...	15		602
1,658	both	18 00		10 00	8 00	5 00	5	2	9,923	no	no			603
1,400		7 00	average							yes				604
41,154	11,841	24 00		10 50	7 50	6 00	1	1	1,197	14	...	14		605
14,000	9,000	15 00		10 00	11 00	7 00	6	2	6,000	7	...	7		606
5,200		11 10		9 00			1	...	900	no	no			607
58,890	both	13 39	average	for	all		9	2		yes				608
1,000		7 60	average							10	...	10		609
875		9 60	average				1	...	40	no	no			610
2,500	3,000	13 00		8 00	8 00	4 00	1	3	2,500	10	...	10	10	611
										10	...	10	10	612
21,000	both	15 00		7 00	6 00	3 50	7	4						613
1,300	172	15 00		12 00		3 00		1	172	no	no			614
1,300	1,200	8 67	average		6 00		2	1	2,200					615
1,000		10 00	average							no	no			616
19,680	13,120	15 00		10 50	6 50	4 25	9	2	25,000	13	...	11	13	617

RETURNS IN DETAIL

BREWERIES, DISTILLERIES AND WINE FACTORIES ;

Office No.	Capital employed including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
	\$		\$	%	%	\$	\$	\$	\$		
618	80,000	75	15,000	6	.....	55	250	600	.....	3	5
619	90,000	313	160,000	12	.....	792	984	.....	.....	26	7
620	9,000	313	26,400	.....	20	112	110	375	.....	7	.....
621	20,000	313	30,000	50	.....	100	200	325	.....	6	8
622	18,000	365	8,000	no	no	69	125	300	400	3	.....
623	5,000	300	5,300	.....	4	8	35	.....	.....	5	.....
624	15,000	365	25,000	10	.....	400	100	1,000	.....	8	.....
625	15,000	300	13,000	no	no	125	185	300	800	2	.....
626	16,500	300	24,000	15	.....	500	75	.....	12,000	10	.....
627	500,000	293	1,321,871	10	.....	4,480	5,052	1,099	970,317	111	102
628	100,000	300	78,720	16	.....	250	1,508	.....	.....	12	.....
629	50,000	300	64,000	.....	10	130	60	.....	646	7	23
630	30,000	90	3,000	no	no	268	58	.....	.....	4	3
631	15,000	300	20,000	.....	yes	144	177	.....	3,594	6	.....
632	25,000	312	75,000	4	.....	500	.....	.....	.....	15	.....
633	9,000	300	16,000	no	no	61	65	.....	25	6	8
634	95,000	300	110,000	3	.....	750	725	4,000	.....	35	.....
635	40,000	300	85,000	no	no	.....	.....	.....	.....	.....	.....
636	65,000	300	90,000	yes	.....	68	365	.....	.....	98	both
637	294,443	300	430,000	5	.....	75,582	3,995	.....	32,062	150	50
638	1,600,000	313	416,000	.....	20	18,438	24,704	50,000	.....	185	.....
639	500,000	300	785,875	15	.....	278	3,231	.....	202,767	233	93
640	75,000	313	60,000	no	no	375	545	.....	14,000	10	1
641	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
642	150,000	300	150,000	10	.....	513	800	.....	.....	35	75
643	415,290	306	398,000	7½	.....	3,607	2,010	17,888	95,049	96	.....
644	90,000	306	64,000	no	no	396	963	.....	.....	13	.....
645	56,717	300	34,996	2	.....	332	321	500	2,096	7	5
646	15,000	300	80,000	10	.....	85	175	.....	.....	40	12
647	204,223	333	182,936	13	.....	1,418	1,378	1,346	33,407	38	.....

CHEMICAL WORKS, MEDICINES AND

648	15,000	300	40,000	no	no	111	180	.....	.....	6	.....
649	16,000	300	8,500	.....	.....	90	59	.....	.....	2	1
650	1,500,000	365	650,000	10	.....	4,150	10,000	78,000	.....	683	.....
651	25,000	300	17,000	.....	.....	199	421	.....	.....	3	.....
652	200,000	275	40,197	.....	31	2,723	.....	.....	.....	16	.....
653	70,300	300	80,000	25	.....	315	400	1,000	500	10	15
654	400,000	365	230,000	yes	.....	47	325	20,000	.....	160	.....
655	3,000	205	6,000	2	.....	17	.....	46	2,680	1	.....
656	226,870	260	257,740	.....	2	355	1,946	3,600	30,593	40	18
657	40,300	300	80,000	33½	.....	200	450	500	.....	6	18
658	20,000	300	16,000	20	.....	.....	.....	.....	.....	1	2
659	16,000	300	530,053	12½	.....	484	350	.....	2,168	10	.....
660	375,000	300	175,000	.....	yes	700	2,000	37,500	.....	200	.....
661	500,000	300	296,035	2	.....	1,064	2,527	7,960	92,415	45	75

FROM MANUFACTURERS.

CIGAR AND TOBACCO FACTORIES.—TABLE No. 26.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
1,330	both	10 00	average	.....	4 50	2	.....	1,500	no	no	.....	.....	618
19,260	.....	16 50	12 00	.....	.....	3	.....	5,196	no	no	.....	.....	619
3,800	.....	12 00	10 00	.....	.....	2	.....	3,000	.....	.....	.....	.....	620
3,300	800	18 00	9 00	.....	5 00	1	1	1,300	10	.....	10	.....	621
1,600	.....	10 50	9 00	.....	.....	2	.....	504	11	.....	skilled	.....	622
2,000	.....	8 00	average	.....	.....	.....	.....	.....	no	no	.....	.....	623
5,000	.....	18 00	12 00	.....	.....	2	.....	5,000	no	no	.....	.....	624
1,144	.....	13 00	9 00	.....	.....	2	.....	1,800	10	.....	skilled	.....	625
5,200	.....	12 00	9 00	.....	.....	1	1	1,800	no	no	.....	.....	626
60,213	29,498	10 90	average	5 80	aver.	6	2	28,696	5	.....	.....	5	627
5,555	.....	12 00	9 00	.....	.....	3	2	5,400	10	.....	10	.....	628
2,800	9,200	11 00	4 00	7 00	3 50	5	.....	10,475	3	.....	3	.....	629
900	75	10 00	average	.....	3 00	.....	.....	.....	.....	.....	.....	.....	630
3,050	.....	12 00	8 00	.....	.....	1	.....	800	yes	.....	.....	.....	631
9,000	.....	15 00	11 00	.....	.....	1	.....	.....	no	no	.....	.....	632
2,000	2,000	10 00	4 00	6 00	3 75	.....	.....	.....	10	.....	10	10	633
18,000	.....	18 00	10 50	.....	.....	3	.....	5,200	5	.....	5	.....	634
30,000	both	6 12	average	for	all	.....	.....	.....	.....	.....	.....	.....	635
124,737	both	9 00	average	for	all	9	1	45,650	2	.....	2	2	636
93,307	.....	9 70	average	.....	.....	17	.....	23,945	.....	.....	.....	.....	637
170,927	25,000	13 50	7 50	13 50	6 50	11	.....	37,820	5	.....	5	5	638
8,000	400	15 40	average	8 00	.....	1	.....	3,000	10	.....	10	.....	639
35,000	both	6 36	average	for	all	2	2	2,500	10	.....	10	10	640
44,090	.....	20 27	7 80	.....	.....	19	3	19,148	11½	.....	11½	.....	641
9,100	.....	20 00	11 00	.....	.....	3	.....	3,960	no	no	.....	.....	642
2,721	825	10 50	.....	.....	4 50	1	1	2,000	5	.....	5	.....	643
20,000	4,000	10 00	average	6 67	aver.	6	1	10,000	5	.....	.....	.....	644
22,700	.....	19 20	.....	.....	.....	8	2	10,212	10	.....	10	.....	645

PERFUMERIES.—TABLE No 27.

4,666	.....	24 00	13 20	.....	.....	.....	.....	15	.....	.....	.....	.....	648
2,300	750	23 00	.....	15 00	.....	.....	.....	.....	.....	.....	.....	.....	649
296,490	.....	14 25	9 75	.....	.....	15	5	30,000	no	no	.....	.....	650
1,986	.....	15 00	12 00	.....	.....	1	.....	330	.....	.....	.....	.....	651
9,000	6,000	18 00	.....	8 00	.....	2	.....	1,740	no	no	.....	.....	652
125,000	.....	18 00	12 00	.....	.....	4	2	10,000	20	.....	20	.....	653
200	.....	.....	9 00	.....	.....	4	.....	4,620	no	no	.....	.....	654
22,725	4,850	13 20	9 00	.....	6 00	4	2	7,000	5	.....	5	.....	655
2,000	5,500	15 00	7 50	8 00	5 00	2	2	3,000	5	.....	5	.....	656
180	600	15 00	.....	12 50	.....	3	4	1,000	no	no	.....	.....	657
4,500	.....	9 00	average	.....	.....	1	.....	1,200	no	no	.....	.....	658
90,000	.....	10 50	.....	.....	.....	.....	.....	.....	yes	.....	.....	.....	659
25,476	16,380	20 50	7 50	7 06	3 75	6	1	6,125	10	.....	10	10	660

RETURNS IN DETAIL

OIL REFINERIES, PAINT AND VARNISH

Office No.	Capital employed, including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
662	\$ 85,000	310	\$ 150,000	20	no	\$ 300	\$ 375	\$ 3,000	\$ 28,500	30	2
663	.....	312	40,000	10	.....	78	80	.....	.....	4	1
664	20,000	300	40,000	no	no	68	210	.....	.....	5	2
665	300,000	280	650,000	no	no	331	1,400	.....	.....	40	3
666	15,000	306	18,000	.....	.....	122	48	.....	.....	4	1
667	80,000	300	183,000	no	.....	.....	1,625	18,000	48,000	28	35
668	2,639,607	307	.....	.....	26	.....	.....	83,570	.....	390	3
669	118,968	305	115,840	.....	yes	689	.....	25,135	.....	12	.....
670	90,000	300	117,775	24	.....	452	614	252	1,309	6	1
671	10,000	300	27,000	no	no	76	26	.....	.....	3	1
672	50,000	300	100,000	no	no	200	300	.....	.....	15	3
673	80,000	305	141,827	3	.....	117	1,278	.....	14,390	22	3
674	229,700	300	335,157	14	.....	244	2,625	22,000	.....	50	.....
675	250,000	300	250,000	25	.....	900	800	1,657	30,000	20	2

GAS WORKS, ELECTRIC LIGHT,

676	500,000	365	192,775	9	.....	4,391	999	39,431	.....	110	.....
677	2,539,094	365	445,273	16	.....	14,283	3,494	148,888	.....	90	.....
678	6,966,220	365	2,069,498	17 ³ / ₄	.....	67,732	18,800	324,992	850,561	810	.....
979	275,000	365	70,000	16	.....	1,500	1,300	20,000	5,500	18	2
680	35,000	365	.....	.....	.....	85	.....	1,000	.....	4	.....
681	121,000	365	42,069	25	.....	.....	560	6,000	.....	9	.....
682	68,303	365	7,805	2	.....	.....	46	1,256	747	4	.....
683	300,000	365	95,000	11	.....	2,826	1,100	7,000	.....	45	.....
684	45,000	365	10,900	.....	.....	332	7,150	787	.....	4	.....
685	14,000	365	4,022	10 ¹ / ₂	.....	.....	95	430	1,957	1	.....
686	7,000	365	.....	25	.....	90	17	150	.....	4	.....
687	30,300	365	7,500	yes	.....	140	3,500	900	710	3	.....
688	60,000	365	8,000	4	.....	175	150	350	100	4	.....
689	150,000	365	15,000	10	.....	1,332	240	9,000	2,000	7	1
690	20,000	360	4,000	33 ³ / ₄	.....	32	89	200	1,239	2	.....
691	280,000	365	40,000	10	.....	2,040	372	.....	.....	6	1
692	110,000	365	15,000	9	.....	276	93	27,000	300	40	1
693	50,000	365	9,000	1 ¹ / ₂	.....	573	.....	2,369	.....	5	2
694	20,000	365	4,629	7	.....	50	67	502	367	1	.....
695	45,000	365	5,200	10	.....	254	90	500	.....	4	.....
696	100,000	365	190,000	15	.....	850	2,250	2,870	1,865	22	3
697	111,452	365	15,966	15	.....	561	.....	1,387	1,664	5	.....
698	260,000	365	102,000	yes	.....	1,900	175	10,661	3,000	10	.....
699	30,000	365	5,000	.....	.....	150	55	250	50	2	.....
700	55,234	365	8,000	5	.....	.....	200	2,283	4,989	3	.....
701	7,000	365	5,900	no	no	85	151	.....	250	9	.....
702	20,000	365	5,500	.....	10	70	.....	.....	200	1	.....

PRINTING, PUBLISHING AND

703	18,800	301	5,000	3	.....	31	61	.....	.....	6	1
704	102,500	300	150,000	10	.....	372	400	10,000	10,000	75	35
705	40,000	300	24,066	10	.....	230	223	3,750	.....	10	4
706	12,000	305	17,511	.....	10	.....	198	750	7,000	10	.....
707	60,000	312	.....	.....	.....	590	325	800	.....	47	3
708	200,000	305	253,874	25	.....	2,617	1,980	.....	16,500	109	35
709	25,000	300	70,000	5	.....	255	600	.....	650	40	5
710	150,000	310	225,000	10	.....	1,537	1,067	5,000	.....	98	13
711	63,984	300	114,375	22	.....	277	821	5,000	.....	41	23
712	3,500	312	3,500	.....	.....	8	13	.....	.....	1	1

RETURNS IN DETAIL

PRINTING, PUBLISHING AND

Office No.	Capital employed including plant.	No. of days in operation during 1910.	Gross value of products manufactured during year.	Production during year.		Taxes paid during year.	Insurance paid during year.	Amount expended on permanent repairs or plant enlargement.	Other uncontrollable expenses.	Total No. of employees, wage-earners only.	
				Increased.	Decreased.					Male.	Female.
713	\$ 3,800	303	\$ 3,850	.....	3%	14	25	250	.....	4	1
714	100,000	300	62,578	9	.....	248	150	907	17,500	50	55
715	10,000	310	32,000	30	.....	23	52	200	500	28	2
716	7,000	300	.....	yes	.....	20	45	.....	.....	5	.....
717	40,000	312	42,000	10	.....	316	442	23,000	5,367	25	3
718	6,000	300	984	14	.....	31	46	50	.....	3	1
719	6,000	300	.....	.....	.....	84	54	300	.....	5	1
720	224,000	300	172,916	10½	.....	616	483	3,636	8,412	70	20
721	500,000	312	563,000	13½	.....	2,498	1,729	10,000	.....	200	10
722	35,000	300	35,000	no	no	60	240	.....	.....	12	.....
723	25,000	305	25,000	10	.....	35	370	1,500	.....	11	H
724	50,000	300	41,663	12	.....	336	279	3,500	5,800	15	.....
725	5,082	300	3,600	.....	.....	.....	122	.....	.....	4	3
726	100,000	312	146,000	12½	.....	1,028	768	.....	.....	50	14
727	100,000	300	120,000	10	.....	249	500	.....	.....	34	8
728	40,000	306	39,187	16	.....	120	252	.....	9,600	14	.....

BRICK AND TILE YARDS, POTTERIES, PORTLAND

729	500,000	210	148,732	22	.....	753	375	8,755	75,000	65	1
730	2,000,000	228	391,215	yes	.....	469	1,122	.....	.....	100	.....
731	10,000	300	9,630	no	no	91	100	.....	.....	9	.....
732	50,000	300	23,913	yes	.....	162	742	.....	2,135	20	.....
733	9,000	140	6,300	20	.....	55	.....	.....	1,250	10	.....
734	339,900	312	149,955	9	.....	.....	592	18,111	19,097	144	.....
735	40,000	365	50,107	400	.....	126	574	17,290	.....	26	.....
736	4,000	264	8,185	30	.....	19	47	252	3,075	7	.....
737	30,000	300	10,000	no	no	220	.....	.....	.....	17	.....
738	20,000	300	16,000	12	.....	120	240	.....	7,500	6	.....
739	2,200	120	3,400	no	no	35	.....	200	.....	6	.....
740	50,000	225	18,094	no	no	21	56	.....	.....	16	.....
741	30,000	170	30,000	100	.....	174	300	12,000	.....	21	.....
742	91,892	294	75,830	.....	25	133	963	168,923	.....	160	.....
743	10,000	300	10,000	no	no	90	60	.....	.....	8	.....
744	20,000	150	16,249	no	no	30	12	1,500	7,500	30	.....
745	70,500	300	49,925	2½	.....	145	331	3,000	16,000	26	.....
746	50,000	365	.....	.....	.....	140	254	.....	.....	9	10
747	300,000	275	95,000	10	.....	.....	.....	.....	26,000	50	.....
748	412,000	.....	.....	.....	.....	24	342	.....	4,220	2	.....
749	600,000	.....	.....	.....	.....	438	300	.....	.....	.....	.....
750	6,500	300	6,125	.....	10	34	100	.....	.....	4	.....
751	20,000	300	48,000	no	no	237	375	.....	3,000	32	1
752	15,500	300	13,249	yes	.....	.....	22	.....	.....	.....	.....
753	355,000	200	100,000	300	.....	375	613	.....	.....	50	.....
754	40,515	300	109,391	145	.....	267	789	9,460	45,596	34	375

MISCELLANEOUS

755	50,000	300	65,000	.....	yes	100	700	.....	.....	15	50
756	65,000	300	100,000	25	.....	250	600	250	.....	30	30
757	30,000	313	83,134	15	.....	125	265	19	.....	21	.....
758	49,319	300	33,448	.....	yes	807	405	.....	9,030	9	9
759	40,000	.....	.....	.....	.....	400	8,000	.....	.....	15	.....

FROM MANUFACTURERS.

ALLIED TRADES.—TABLE NO. 30.—Continued.

Total wages paid during year to wage-earners.		Weekly wages paid.				Total No. salaried clerks and officials.		Total salaries paid to clerks, officials, etc., during year.	Wages during year have—		Class of employees affected.		Office No.
Male.	Female.	Male.		Female.		Male.	Female.		Increased.	Decreased.	Wage-earners.	Clerks, officials, etc.	
		Skilled.	Unskilled.	Skilled.	Unskilled.								
\$	\$	\$ c.	\$ c.	\$ c.	\$ c.			\$	%	%	%	%	
1,475	375	12 00	6 00	4 00	4 00	90	60	28,957	23		3		713
20,300	8,000	30 00	8 00	11 00	5 50	3	1	3,300	10				714
20,000	800	20 00	5 50	8 00	5 00	3	1	3,300	10				715
2,650		12 00	3 00						yes				716
22,293	both	15 50	average	for	all	4	3		10		10	10	717
1,066	78	8 00	5 00		1 50				no	no			718
2,524	360	9 50	2 50		3 00	1		200	15		skilled		719
37,250	4,900	17 50	7 50	5 00		3	6	9,000	5				720
158,535	5,772	15 85	6 00	10 00	4 00	60	10	70,000	yes				721
9,000		21 00				1	1	4,160	5				722
6,240	900	18 00	3 00	6 00	5 00	5	2	3,500	no	no			723
9,805		20 00	15 00			8	2	8,710	14		14	14	724
2,800	800	12 00		6 00									725
80,000	both	24 00	3 00	19 00	3 00				3		3		727
15,600	3,300	16 50	10 50	8 25	4 00	6	2	10,800	yes				726
10,544		23 00	3 75			2	2	3,780	no	no			728

CEMENT WORKS.—TABLE NO. 31.

18,420	550	15 00	9 00	11 00	...	3	...	4,044	no	no	...	...	729
47,089	...	21 00	13 20	...	...	5	...	6,000	no	no	...	...	730
3,586	...	12 75	8 25	...	...	...	...	...	10	...	10	...	731
10,525	...	15 00	11 25	...	...	2	1	2,184	10	...	10	...	732
1,673	...	9 00	...	...	...	1	...	250	no	no	...	...	733
87,336	...	13 00	9 90	...	...	8	1	12,576	10	...	10	10	234
13,909	...	12 60	average	...	...	2	...	1,526	16	...	16	16	735
3,536	...	13 50	10 50	...	...	1	...	1,080	10	...	10	15	736
9,000	...	19 50	12 00	...	...	1	...	1,000	no	no	...	...	737
3,300	...	10 96	5 50	...	...	2	1	2,200	10	...	...	...	738
1,200	...	12 00	9 00	...	...	...	...	...	5	...	...	...	739
7,548	...	10 80	average	...	...	...	...	...	...	...	...	...	740
10,000	...	18 00	average	...	...	...	...	...	no	no	...	...	741
91,300	...	18 00	9 75	...	...	6	...	8,800	no	no	...	...	742
400	...	12 00	7 50	...	...	...	...	...	no	no	...	...	743
7,642	...	10 50	9 60	...	...	...	...	...	no	no	...	...	744
16,000	...	24 00	10 95	...	...	1	...	1,233	7	...	7	...	745
5,400	2,500	10 00	average	5 00	av.	...	...	...	no	no	...	...	546
26,000	...	20 00	9 00	...	...	4	...	...	10	...	...	...	747
1,396	...	12 00	...	...	...	1	...	1,200	...	...	...	...	748
...	...	...	...	...	...	...	...	...	...	...	...	...	749
1,872	...	15 00	10 00	...	...	...	...	...	...	...	...	...	750
26,648	416	20 00	6 00	8 00	...	...	1	416	yes	...	...	...	751
...	...	...	...	...	...	2	...	1,380	6	...	...	6	752
24,550	...	13 50	9 75	...	...	3	...	2,800	...	...	...	...	753
13,532	55,486	16 50	10 50	4 20	3 00	2	1	3,723	no	no	...	...	754

MANUFACTURES.—TABLE NO. 32.

9,950	both	16 50	9 00	6 00	5 00	1	1	950	yes	...	...	...	755
18,000	5,000	12 00	average	...	3 33	5	3	...	...	...	...	...	756
11,632	...	20 40	9 00	...	...	8	1	9,381	10	...	10	10	757
5,400	2,100	17 00	4 50	...	5 62	8	3	7,700	11	...	11	11	758
10,000	...	15 00	12 00	...	...	1	1	...	15	...	skilled	...	759

WAGES AND THEIR PROPORTION TO PRODUCT.

As 52 of the establishments included in the previous tables omit necessary details there are only 707 given in the following tables which show the annual and daily wages paid in the various industries and the proportion they bear to the amount of the gross product. In the average percentage of wages to product there has been no change as compared with the previous year.

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.

LUMBER MANUFACTURERS.—TABLE NO. 1.

Schedule No.	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
1	262	350	79,400	515,000	303 05	87	15	85	1
2	87	83	18,700	80,000	214 98	2 59	22	78	2
3	45	175	23,800	88,000	528 89	3 02	27	73	3
5	152	150	25,900	50,000	170 40	1 14	52	48	5
6	152	110	31,700	60,000	208 55	1 90	53	47	6
7	40	170	10,000	40,000	250 00	1 47	25	75	7
8	294	100	66,100	135,000	224 83	2 25	49	51	8
9	48	300	22,443	65,000	467 56	1 56	35	65	9
10	14	65	2,800	9,000	200 00	3 08	31	69	10
11	82	250	32,050	40,000	390 24	1 16	80	20	11
12	1	45	40	280	40 00	89	14	86	12
13	254	143	85,909	370,381	338 22	2 37	23	77	13
14	13	225	5,750	14,980	442 31	1 97	32	68	14
16	130	175	46,700	400,000	359 23	2 05	12	88	16
17	169	279	108,715	600,398	643 28	2 31	18	82	17
18	3	150	500	2,000	166 67	1 11	25	75	18
19	1,328	190	477,600	1,000,000	359 64	1 89	47	53	19
20	42	185	26,700	114,859	635 71	3 44	23	77	20
22	124	164	73,605	322,000	593 60	3 62	23	77	22
23	3	100	450	500	150 00	1 50	90	10	23
24	458	160	147,779	750,000	322 66	2 02	20	80	24
25	10	125	5,250	25,000	525 00	4 20	21	79	25
26	620	300	215,000	480,000	346 77	1 16	49	51	26
27	5	200	1,100	6,000	220 00	1 10	18	82	27
28	117	110	25,670	172,000	219 40	2 00	15	85	28
30	15	312	7,000	10,000	466 67	1 50	70	30	30
31	73	123	23,200	112,000	317 81	2 58	21	79	31
32	13	90	1,350	4,000	103 85	1 15	34	66	32
33	18	300	9,000	200,000	500 00	1 67	5	95	33
34	8	30	300	1,000	39 50	1 32	30	70	34
35	23	150	9,520	30,000	413 91	2 76	32	68	35
36	20	150	5,000	20,000	250 00	1 67	25	75	36
37	27	182	7,800	21,000	288 89	1 59	37	63	37
38	30	150	10,000	25,000	333 33	2 20	40	60	38
39	62	310	31,716	216,427	511 55	1 65	15	85	39
40	8	225	1,500	13,000	187 50	80	12	88	40
41	25	100	2,500	20,000	100 00	1 00	13	87	41
42	4	200	1,200	15,000	300 00	1 50	8	92	42
43	10	100	4,100	7,000	410 00	4 10	59	41	43
44	53	200	23,000	100,000	415 10	2 08	23	77	44
46	40	307	21,401	95,000	535 03	1 74	23	77	46
47	554	294	142,998	500,000	258 12	88	28	72	47
48	58	300	30,520	103,156	526 21	2 75	29	71	48

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

LUMBER MANUFACTURERS.—TABLE NO. 1.—Continued.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
49	226	300	\$ 71,300	\$ 225,000	\$ c. 315 49	\$ c. 1 05	% 31	% 69	49
50	216	150	67,000	375,000	310 19	2 07	18	82	50
51	8	300	5,446	30,000	680 75	2 27	18	82	51
52	295	307	49,000	175,000	166 10	54	28	72	52
53	312	180	212,500	400,000	681 09	3 78	53	47	53
54	65	250	25,000	150,000	384 62	1 54	17	83	54
55	8	292	5,600	45,000	700 00	2 40	12	88	55
56	56	182	30,420	90,000	543 21	2 98	34	66	56
	6,680	average 192	2,332,032	8,322,981	average 354 12	average 1 97	average 30	average 70	

PLANING MILLS, SASH AND DOOR FACTORIES, ETC.—TABLE NO. 2.

57	115	300	51,000	400,000	443 48	1 48	13	87	57
58	104	313	48,366	145,534	465 06	1 49	33	67	58
59	21	200	8,250	30,000	392 86	1 96	28	72	59
60	12	300	5,780	39,700	481 67	1 61	15	85	60
61	49	300	27,000	95,000	551 02	1 84	28	72	61
62	67	300	44,100	300,000	658 21	2 19	15	85	62
63	3	150	400	2,500	133 33	89	16	84	63
64	67	305	35,175	392,610	525 00	1 72	9	91	64
65	58	300	28,700	140,000	496 55	1 66	21	79	65
66	7	156	1,390	4,200	198 57	1 27	33	67	66
67	29	300	13,000	320,000	448 28	1 50	4	96	67
68	46	300	26,800	45,000	582 61	1 94	60	40	68
70	40	280	16,018	50,000	400 00	1 43	32	68	70
71	25	300	12,000	50,000	480 00	1 60	24	76	71
72	11	300	6,180	25,000	561 82	1 87	25	75	72
73	56	310	39,965	75,000	713 66	2 30	53	47	73
74	3	33	198	1,072	66 00	2 00	18	82	74
75	58	308	27,100	186,000	467 24	1 58	15	85	75
76	119	300	58,200	300,000	489 08	1 63	20	80	76
77	2	280	500	11,000	250 00	89	5	95	77
78	57	240	34,800	62,000	666 67	2 78	56	44	78
79	33	310	11,144	42,000	337 70	1 09	27	73	79
80	46	150	38,000	175,000	826 09	5 51	22	78	80
81	13	300	6,300	42,000	484 62	1 62	15	85	81
82	12	300	2,500	20,000	208 33	70	13	87	82
84	44	300	31,000	180,000	704 55	2 35	17	83	84
85	52	300	21,700	100,000	417 31	1 39	22	78	85
86	134	300	87,000	300,000	649 25	2 16	29	71	86
87	54	298	36,381	85,910	673 72	2 26	42	58	87
89	53	300	25,000	105,000	471 70	1 57	24	76	89
90	67	300	24,200	125,410	361 19	1 20	19	81	90
91	14	305	10,534	150,000	752 43	2 46	7	93	91
92	35	305	16,000	75,000	446 71	1 50	21	79	92
93	67	301	37,000	150,000	552 39	1 84	25	75	93
94	68	300	20,080	39,000	295 30	98	51	49	94
95	17	285	9,238	36,500	543 41	1 91	25	75	95
96	6	300	2,500	10,000	416 67	1 39	25	75	96
	1,664	Average 276	863,499	4,310,436	Average 476 01	Average 1 77	Average 25	Average 75	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

WOODWORKING FACTORIES, SPECIALTIES IN WOODENWARE.—TABLE NO. 3.

Schedule No.	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
97	464	265	300,000	1,120,000	646 56	2 44	27	73	97
98	49	330	18,618	72,570	379 96	1 15	26	74	98
99	98	300	52,600	200,000	536 73	1 79	26	74	99
100	11	300	6,997	18,500	636 09	2 12	32	68	100
101	38	300	20,202	50,488	531 63	1 77	40	60	101
102	161	300	62,629	182,000	389 00	1 30	34	66	102
103	15	300	6,000	15,000	400 00	1 33	37	63	103
104	96	275	40,000	250,000	416 67	1 52	16	84	104
105	16	300	6,000	10,000	375 00	1 25	60	40	105
106	16	250	5,000	25,000	312 50	1 25	20	80	106
107	12	305	2,957	5,025	246 42	81	59	41	107
108	19	100	6,780	15,000	356 84	3 57	45	55	108
109	13	300	6,600	15,500	507 70	1 69	43	57	109
110	45	301	14,511	32,000	322 47	1 07	45	55	110
111	51	275	18,000	45,000	352 94	1 28	40	60	111
112	15	225	4,000	7,600	266 67	1 19	52	48	112
113	168	300	63,874	260,000	380 20	1 27	25	75	113
114	51	300	21,000	80,000	411 76	1 37	26	74	114
115	31	277	15,000	66,000	483 87	1 75	23	77	115
116	28	300	12,163	55,000	434 39	1 45	22	78	116
117	37	300	24,350	40,000	658 11	2 19	1	39	117
118	43	360	16,400	75,000	381 40	1 06	22	78	118
119	62	305	26,200	140,000	422 58	1 39	19	81	119
120	22	250	9,800	35,000	445 45	1 78	28	72	120
121	13	305	9,361	12,000	720 08	2 36	78	22	121
122	50	313	20,800	78,752	416 00	1 33	26	74	122
123	64	305	39,000	70,000	609 37	2 00	56	44	123
124	117	250	35,700	76,000	305 13	1 22	47	53	124
125	25	300	15,500	125,000	620 00	2 07	12	88	125
126	115	300	40,600	200,000	353 04	1 18	20	80	126
127	40	300	16,746	110,000	418 65	1 40	15	85	127
128	38	200	8,920	20,000	234 74	1 17	45	55	128
129	8	310	2,795	7,000	349 38	1 13	40	60	129
130	24	250	9,449	37,000	393 71	1 57	26	74	130
131	22	300	9,635	60,472	437 95	1 46	16	84	131
132	5	300	3,672	24,000	734 40	2 45	15	85	132
2,082	Average	285	971,859	3,634,907	Average	Average	Average	Average	
					440 94	1 59	34	66	

FURNITURE MANUFACTURERS; BANK AND OFFICE FITTINGS.—TABLE NO. 4.

133	44	300	24,600	50,000	559 09	1 86	49	51	133
134	85	300	54,652	535,000	642 96	2 14	10	90	134
135	116	300	50,500	175,000	435 34	1 45	29	71	135
136	36	298	17,895	66,341	497 08	1 67	27	73	136
137	40	300	17,442	60,000	436 05	1 45	29	71	137
138	38	300	15,218	38,000	400 47	1 33	40	60	138
139	2	290	850	3,000	425 00	1 47	28	72	139
140	46	300	18,600	75,000	404 35	1 35	24	76	140
141	73	300	36,500	115,000	500 00	1 67	32	68	141
142	24	230	7,706	14,000	321 08	1 40	55	45	142
143	46	300	23,263	50,000	505 72	1 69	47	53	143
144	30	300	13,650	30,000	455 00	1 52	46	54	144
145	6	312	3,352	15,000	558 67	1 15	22	78	145
146	302	302	161,100	305,000	533 44	1 77	53	47	146
148	94	300	53,939	174,000	573 82	1 91	31	69	148

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

FURNITURE, BANK AND OFFICE FITTINGS.—TABLE NO. 4—Continued.

Schedule No.	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
149	114	300	43,481	140,000	381 41	1 27	31	69	149
150	54	300	30,000	60,000	555 56	1 45	50	50	150
151	57	290	26,038	83,500	456 67	1 57	31	69	151
152	52	300	25,800	77,000	496 15	1 65	34	66	152
153	52	300	25,850	60,000	497 12	1 66	43	57	153
154	59	300	25,000	100,000	423 73	1 41	25	75	154
155	79	300	33,300	90,000	421 52	1 41	37	63	155
156	77	300	37,000	100,000	480 52	1 60	37	63	156
157	137	295	64,770	250,132	472 82	1 60	23	77	157
158	62	300	22,622	75,000	364 84	1 22	30	70	158
159	52	310	21,600	85,000	415 38	1 34	25	75	159
160	49	300	23,013	63,024	469 65	1 57	36	64	160
161	15	305	7,461	47,600	497 40	1 63	16	84	161
162	10	300	3,100	16,000	310 00	1 03	19	81	162
163	101	300	42,339	150,00	419 20	1 40	28	72	163
164	320	290	126,050	350,000	393 91	1 36	36	64	164
165	59	300	15,000	150,000	254 24	85	10	90	165
166	90	308	34,655	91,854	385 05	1 25	38	62	166
167	50	300	19,239	67,000	384 78	1 28	29	71	167
168	24	300	10,142	32,749	422 58	1 41	31	69	168
169	48	300	18,940	52,000	394 58	1 32	36	64	169
170	133	300	68,677	205,000	516 37	1 72	33	67	170
171	157	300	126,000	275,000	802 55	2 67	46	54	171
	2,833	Average 298	1,349,344	4,226,200	Average 459 58	Average 1 49	Average 33	Average 67	

CARRIAGES, VEHICLES AND PARTS THEREOF, MOTORS, ETC.—TABLE NO. 5.

172	66	300	28,900	136,000	437 88	1 46	21	79	172
173	72	313	26,400	125,000	366 67	1 17	21	79	173
174	22	310	10,966	64,089	498 45	1 61	17	83	174
175	102	300	57,395	230,000	562 70	1 88	25	75	175
176	11	300	5,650	20,000	513 64	1 71	28	72	176
177	418	300	152,226	750,000	364 18	1 22	20	80	177
179	52	313	32,823	126,705	631 21	2 02	26	74	179
181	265	213	95,000	325,000	358 49	1 68	29	71	181
182	194	310	82,523	365,000	425 38	1 37	23	77	182
183	9	310	5,330	24,000	592 22	1 91	22	78	183
184	61	300	30,500	155,000	500 00	1 67	20	80	184
185	47	300	25,250	95,000	537 23	1 79	27	73	185
186	68	300	27,034	210,285	397 56	1 33	13	87	186
187	106	300	59,485	740,885	561 18	1 87	8	92	187
188	160	300	86,604	444,594	541 28	1 80	19	81	188
189	34	300	15,258	65,000	448 76	1 50	23	77	189
190	439	308	177,641	420,000	404 65	1 31	42	58	190
191	29	300	13,700	50,000	472 41	1 57	27	73	191
192	155	275	85,000	314,715	548 39	1 99	27	73	192
193	18	300	7,300	35,000	405 55	1 35	21	79	193
194	11	305	6,048	62,500	549 82	1 79	10	90	194
195	29	275	17,124	41,537	590 48	2 15	41	59	195
	2,368	Average 297	1,048,159	4,800,310	Average 486 73	Average 1 64	Average 23	Average 77	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—*Continued.*

AGRICULTURAL IMPLEMENTS, DAIRY MACHINERY, ETC.—TABLE NO. 6.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
196	181	300	50,000	200,000	276 24		25	75	196
197	166	300	77,000	300,000	463 86	1 55	26	74	197
198	408	282	191,692	640,000	469 83	1 67	30	70	198
199	125	300	53,700	200,000	429 60	1 43	27	73	199
200	21	300	7,074	26,000	336 86	1 12	27	73	200
201	76	290	45,484	170,000	598 47	2 06	27	73	201
202	37	300	10,700	29,000	289 19	97	37	63	202
203	52	300	15,000	99,000	288 46	96	15	85	203
204	54	280	24,300	200,000	450 00	1 61	12	88	204
205	98	240	40,000	290,000	408 16	1 70	14	86	205
206	72	310	29,753	125,000	413 24	1 33	24	76	206
207	37	300	15,500	80,000	418 92	1 40	19	81	207
208	75	300	18,000	210,000	240 00	80	9	91	208
209	76	310	42,040	115,000	553 16	1 78	37	63	209
210	50	300	30,000	125,000	600 00	2 00	24	76	210
211	23	300	12,803	36,474	556 65	1 86	35	65	211
212	30	310	15,229	100,000	507 63	1 64	15	85	212
	1,581	Average 295	678,275	2,945,474	Average 429 43	Average 1 46	Average 24	Average 76	

PIANO, ORGAN AND MUSICAL INSTRUMENT FACTORIES.—TABLE NO. 7.

213	90	306	53,345	176,106	592 72	1 94	30	70	213
214	32	300	16,000	65,000	500 00	1 67	25	75	214
215	63	303	27,000	100,000	428 57	1 41	27	73	215
216	2	300	875	4,515	437 50	1 46	19	81	216
217	95	305	42,163	154,792	443 82	1 46	27	73	217
218	117	300	62,737	199,000	536 21	1 79	32	68	218
219	33	300	17,960	63,531	544 24	1 81	28	72	219
	432	Average 302	220,080	762,944	Average 497 58	Average 1 65	Average 27	Average 73	

WOOD-PULP, PAPER AND STATIONERY.—TABLE NO. 8

220	15	300	8,624	50,000	575 00	1 92	17	83	220
221	93	305	64,500	90,000	693 15	2 27	72	28	221
222	27	300	4,500	30,000	166 67	56	15	85	222
223	193	275	91,271	600,476	472 81	1 72	15	85	223
224	23	300	9,750	30,000	423 91	1 41	33	67	224
225	20	300	6,839	25,000	341 95	1 14	27	73	225
226	23	300	7,000	30,000	304 35	1 01	23	77	226
227	23	250	13,968	60,249	607 30	2 43	23	77	227
228	25	300	6,325	27,000	253 00	84	23	77	228
229	8	300	3,800	20,000	475 00	1 22	19	81	229
230	26	300	10,335	33,631	397 50	1 33	31	69	230
231	8	290	2,350	5,500	293 75	1 13	43	57	231
233	25	300	10,600	35,000	424 00	1 41	30	70	233
234	7	300	2,325	4,373	335 00	1 12	53	47	234
235	18	300	7,600	35,000	422 22	1 41	22	78	235
236	65	304	33,600	216,445	516 92	1 70	16	84	236
237	52	250	13,500	105,000	259 62	1 04	13	87	237
238	111	300	40,000	131,000	364 86	1 22	31	69	238
239	103	300	53,784	277,120	522 18	1 74	19	81	239
240	11	300	7,000	23,000	636 36	2 13	30	70	240
241	15	280	10,200	54,000	680 00	2 43	19	81	241
	891	Average 293	407,871	1,882,794	Average 436 45	Average 1 48	Average 27	Average 73	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

FOUNDRIES, ROLLING MILLS, STRUCTURAL IRON.—TABLE NO. 9.

Schedule No	Number of per- sons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' aver- age annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, inter- est, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
242	144	300	91,992	358,000	638 83	2 13	26	74	242
243	151	286	75,086	342,573	497 25	1 74	22	78	243
244	156	295	91,923	420,317	588 00	1 99	22	78	244
245	137	300	74,657	210,000	544 94	1 84	36	64	245
246	45	275	24,702	56,481	548 93	2 00	44	56	246
247	46	294	30,250	60,551	657 61	2 24	50	50	247
248	4	280	2,800	4,000	700 00	2 50	70	30	248
249	22	300	9,000	25,000	409 09	1 36	36	64	249
250	47	305	28,618	90,000	608 89	2 00	32	68	250
251	64	300	46,000	140,000	718 75	2 40	33	67	251
252	138	300	89,172	142,234	646 17	2 15	63	37	252
253	20	305	7,128	18,000	356 40	1 17	40	60	253
254	310	307	165,383	536,241	533 49	1 74	31	69	254
255	135	300	68,000	300,000	503 70	1 68	23	77	255
256	29	310	16,800	180,000	579 31	1 87	9	91	256
257	14	300	7,650	20,000	546 43	1 82	38	62	257
258	90	300	70,134	170,814	779 27	2 60	41	59	258
259	8	305	3,400	8,000	425 00	1 39	43	57	259
260	197	340	143,480	787,780	728 32	2 14	18	82	260
261	7	150	3,700	25,000	528 57	3 52	15	85	261
262	16	312	7,500	16,000	468 75	1 50	47	53	262
263	104	225	87,202	197,265	838 46	3 73	44	56	263
	1,884	Average 240	1,143,777	4,118,256	Average 583 92	Average 2 07	Average 36	Average 64	

STOVES, HOT AIR FURNACES, ETC.—TABLE NO. 10.

264	65	307	25,263	71,000	388 66	1 27	36	64	264
265	236	286	93,045	901,325	394 26	1 38	10	90	265
266	32	300	17,594	56,018	549 81	1 83	31	69	266
267	121	300	70,507	137,000	582 70	1 92	51	49	267
268	12	250	5,194	11,000	173 13	69	47	53	268
269	13	300	9,336	55,000	718 15	2 39	17	83	269
270	80	298	47,329	114,500	591 49	1 98	41	59	270
271	155	275	77,660	273,000	501 03	1 82	29	71	271
272	32	300	26,000	90,000	812 50	2 71	29	71	272
273	35	250	16,103	95,009	460 00	1 84	17	83	273
274	53	300	33,000	75,000	622 64	2 02	44	56	274
275	54	300	32,200	80,000	596 30	1 99	40	60	275
276	94	300	50,537	138,824	537 63	1 79	36	64	276
277	52	300	26,000	50,000	500 00	1 66	52	48	277
278	24	260	17,680	48,000	736 67	2 83	37	63	278
279	101	300	55,800	130,000	552 48	1 84	43	57	279
280	223	290	124,480	275,000	558 21	1 92	45	55	280
	1,382	Average 289	727,728	2,600,676	Average 545 63	Average 1 88	Average 36	Average 64	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—*Continued.*

ENGINE, BOILER AND MACHINERY FACTORIES.—TABLE NO. 11.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
281	152	308	84,796	265,000	557 83	1 81	32	68	281
282	5	331	2,154	20,000	430 80	1 30	11	89	282
284	234	302	125,875	324,626	537 93	1 78	39	61	284
285	33	300	15,893	55,000	481 61	1 61	29	71	285
286	38	300	21,400	42,000	563 16	1 88	51	49	286
287	19	300	9,026	31,817	475 05	1 59	28	72	287
288	21	300	10,000	38,000	476 19	1 59	26	74	288
289	264	312	190,000	600,000	719 70	2 31	32	68	289
290	420	280	239,000	625,000	569 05	2 03	38	62	290
291	91	300	34,250	192,000	376 37	1 25	18	82	291
292	40	300	15,472	46,500	386 80	1 29	33	67	292
293	4	300	3,400	5,000	850 00	2 83	68	32	293
294	42	300	20,900	83,000	497 62	1 66	25	75	294
295	134	300	84,000	250,000	626 87	2 09	34	66	295
296	21	310	11,200	30,000	533 33	1 72	37	63	296
297	11	300	6,397	15,000	581 55	1 94	43	57	297
298	40	305	14,743	29,335	368 58	1 21	50	50	298
299	14	300	8,000	18,000	571 43	1 90	44	56	299
300	27	300	18,288	45,000	677 33	2 29	41	59	300
301	7	305	5,000	8,350	714 29	2 34	60	40	301
302	17	300	12,000	60,000	705 88	2 35	20	80	302
303	10	300	3,500	11,000	350 00	1 17	32	68	303
304	53	300	31,150	65,515	587 74	1 96	48	52	304
305	8	313	5,443	22,500	680 38	2 17	24	76	305
306	63	299	23,812	81,697	377 50	1 26	29	71	306
307	20	300	8,000	20,000	400 00	1 33	40	60	307
310	29	300	17,923	125,000	618 03	2 06	14	86	310
311	16	300	6,000	20,000	375 00	1 25	30	70	311
312	80	278	35,934	84,996	449 17	1 62	42	58	312
314	35	302	21,320	71,200	609 14	2 02	30	70	314
315	3	300	1,100	3,500	366 67	1 22	31	69	315
316	12	300	5,840	21,400	486 67	1 62	27	73	316
317	8	300	7,000	35,000	875 00	2 92	20	80	317
318	20	300	13,007	35,000	650 00	2 17	37	63	318
319	5	200							319
320	28	300	12,312	25,000	439 71	1 47	49	51	320
321	27	300	12,490	34,700	461 85	1 54	36	64	321
323	36	295	17,400	75,000	483 33	1 64	23	77	323
324	19	300	8,200	20,000	431 58	1 44	41	59	324
325	86	300	38,000	100,000	441 86	1 47	38	62	325
327	81	310	40,415	143,720	498 95	1 61	28	72	327
328	27	300	17,165	36,712	635 74	2 12	47	53	328
329	41	276	16,401	60,000	400 00	1 45	27	73	329
	2,341	Average 306	1,274,186	3,975,579	Average 531 42	Average 1 77	Average 35	Average 65	

METALLIC ROOFING AND LIGHT IRONWARE.—TABLE NO. 12.

330	26	300	18,000	140,000	692 31	2 31	13	87	330
331	54	300	28,810	129,892	533 52	1 78	22	78	331
332	28	310	16,361	41,154	584 32	1 88	40	60	332
333	13	300	2,717	31,251	209 00	70	9	91	333
334	47	300	22,100	60,000	470 21	1 57	37	63	334
335	9	300	4,750	10,000	527 78	1 76	47	53	335
336	51	300	27,780	76,715	544 71	1 82	36	64	336
337	10	300	3,000	8,000	300 00	1 00	38	62	337

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

METALLIC ROOFING AND LIGHT IRONWARE.—TABLE No. 12.—Continued.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
338	58	300	26,800	40,000	462 07	1 54	69	31	338
339	5	300	3,000	5,500	600 00	2 00	55	45	339
340	21	300	11,876	95,000	565 52	1 89	12	88	340
341	124	300	60,000	275,000	483 87	1 61	22	78	341
342	32	300	16,200	75,000	506 25	1 69	22	78	342
343	62	300	20,936	50,000	337 69	1 13	42	58	343
344	7	300	2,780	15,000	397 14	1 32	19	81	344
345	7	310	4,537	14,832	648 14	2 09	30	70	345
346	8	310	5,688	26,544	711 00	2 21	21	79	346
347	47	300	18,300	50,000	389 36	1 30	37	63	347
349	315	300	177,537	59,767	563 61	1 88	30	70	349
350	70	300	30,000	130,000	428 57	1 43	23	77	350
351	101	306	54,577	210,000	543 68	1 78	26	74	351
352	59	240	18,200	100,000	308 47	1 29	18	82	352
	1,154	Average 299	573,949	1,643,655	Average 491 24	Average 1 61	Average 30	Average 70	

WIRE FENCE, WIRE ROPE AND WIRE CLOTH FACTORIES.—TABLE No. 13.

353	33	305	11,525	35,710	349 24	1 15	32	68	353
354	85	250	42,800	350,000	503 55	2 01	12	88	354
355	30	300	16,700	45,000	556 67	1 86	37	63	355
356	32	300	16,112	172,207	503 50	1 68	9	91	356
357	12	300	4,850	7,000	404 17	1 35	69	31	357
358	43	300	14,839	50,000	345 09	1 15	30	70	358
359	38	210	24,000	250,000	631 58	3 01	10	90	359
360	12	300	4,468	30,000	372 33	1 24	15	85	360
361	9	300	6,000	75,000	666 67	2 22	8	92	361
362	266	300	138,456	600,000	520 51	1 74	23	77	362
	560	Average 287	279,750	1,614,917	Average 485 33	Average 1 74	Average 25	Average 75	

BRASSWARE AND PLUMBERS' SUPPLIES.—TABLE No. 14.

363	173	300	115,000	400,000	664 74	2 22	19	81	363
364	19	300	10,800	25,000	568 42	1 89	43	57	364
365	173	300	115,000	400,000	664 74	2 22	19	81	365
366	41	300	23,402	65,000	570 78	1 90	36	64	366
367	174	300	78,360	250,000	450 34	1 50	31	69	367
368	92	300	60,200	200,000	654 35	2 18	30	70	368
369	30	300	15,775	35,390	525 83	1 75	45	55	369
370	51	300	28,461	94,000	558 06	1 86	30	70	370
371	201	300	92,914	359,866	462 26	1 54	26	74	371
372	4	328	3,000	9,100	750 00	2 29	33	67	372
374	146	300	69,493	172,308	475 98	1 59	43	57	374
375	1,732	364	1,176,340	8,516,774	679 18	1 87	14	86	375
376	66	300	30,200	80,000	457 58	1 53	38	62	376
377	33	300	17,500	60,000	530 30	1 77	29	71	377
378	18	300	13,521	13,940	751 17	2 50	13	87	378
379	17	300	13,022	27,060	766 00	2 55	48	52	379
	2,970	Average 306	1,862,988	10,708,438	Average 595 61	Average 1 95	Average 31	Average 69	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

SILVER-PLATED WARE AND JEWELLERY FACTORIES.—TABLE NO. 15.

Schedule No.	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c	%	%	
381	83	300	49,117	149,368	591 77	1 97	33	67	381
382	37	300	15,305	157,237	413 65	1 38	10	90	382
383	7	300	3,200	5,500	457 14	1 52	58	42	383
384	32	300	10,250	45,000	320 31	1 07	23	77	384
385	111	300	69,351	173,302	624 78	2 08	40	60	385
386	174	300	73,649	281,204	423 27	1 41	26	74	386
	444	average 300	220,872	811,611	average 471 82	average 1 57	average 32	average 68	

WOOLLEN, COTTON AND YARN MILLS.—TABLE NO. 16.

387	1,039	301	372,000	1,780,000	358 04	1 19	21	79	387
388	318	303	117,162	633,234	368 43	1 22	18	82	388
389	20	275	5,500	15,000	275 00	1 00	37	63	389
390	7	300	3,531	20,000	504 43	1 68	18	82	390
391	180	275	69,200	260,000	384 44	1 40	27	73	391
392	50	240	7,187	14,850	143 75	60	49	51	392
393	38	300	17,500	70,000	460 53	1 54	25	75	393
394	7	305	5,200	6,000	742 86	2 44	87	13	394
395	60	300	16,000	105,000	266 07	89	15	85	395
396	43	175	4,550	12,000	105 81	61	38	62	396
397	54	225	5,450	11,000	307 89	50	49	51	397
399	31	275	10,500	12,000	338 71	1 23	87	13	399
400	7	200	1,000	4,000	142 86	71	25	75	400
401	8	270	1,653	16,710	206 63	77	10	90	401
402	16	300	5,000	30,000	312 50	1 04	17	83	402
404	22	200	6,650	9,500	302 28	1 51	14	86	404
405	2	270	1,500	2,000	750 00	2 78	75	25	405
406	27	300	10,000	60,000	370 37	1 23	17	83	406
407	14	250	3,831	19,500	273 64	1 09	20	80	407
408	9	313	4,053	22,167	450 33	1 44	18	82	408
409	253	280	65,050	300,000	257 11	92	22	78	409
411	36	300	12,600	75,000	350 00	1 17	17	83	411
412	35	300	11,550	50,000	330 00	1 11	23	77	412
414	15	180	4,000	14,740	266 67	1 48	27	73	414
415	34	290	8,500	35,000	250 00	86	24	76	415
	2,321	average 269	769,116	3,577,901	average 340 76	average 1 22	average 31	average 69	

KNITTED GOODS FACTORIES.—TABLE NO. 17.

416	59	300	14,200	50,000	240 68	80	28	72	416
418	339	300	125,873	450,000	371 30	1 24	28	72	418
419	34	300	11,246	74,850	330 76	1 10	15	85	419
420	325	300	85,000	300,000	261 85	87	28	72	420
421	56	300	19,800	85,000	353 57	1 18	23	77	421
422	5	200	600	4,000	120 00	60	15	85	422
423	24	300	12,360	73,000	515 00	1 72	17	83	423
424	3	300	600	10,000	200 00	67	6	94	424
425	105	312	28,329	157,350	269 80	86	18	82	425

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

KNITTED GOODS FACTORIES.—TABLE NO. 17—Continued.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
426	136	270	\$ 49,500	\$ 225,000	\$ c. 363 97	\$ c. 1 35	% 22	% 78	426
427	143	300	42,750	200,000	298 95	1 00	21	79	427
428	145	245	36,460	113,000	451 45	1 03	32	68	428
429	33	300	7,233	25,000	219 18	73	29	71	429
430	318	303	116,850	633,234	367 45	1 21	18	82	430
	1,725	average 302	550,801	2,400,434	average 311 70	average 1 03	average 21	average 79	

CLOTHING FACTORIES, MILLINERY, ETC.—TABLE NO. 18.

431	225	300	87,500	265,000	388 89	1 30	33	67	431
432	190	290	54,200	215,000	295 26	98	25	75	432
433	7	275	3,300	8,000	471 43	1 71	41	59	433
434	98	275	38,200	175,000	389 80	1 42	22	78	434
435	135	300	47,758	129,000	353 76	1 18	37	63	435
436	68	300	21,443	39,043	315 34	1 05	55	45	436
437	16	300	7,618	55,000	476 13	1 59	14	86	437
438	195	300	35,000	123,000	180 00	60	28	72	438
439	55	300	17,000	75,000	309 09	1 03	23	77	439
440	63	300	20,000	100,000	317 46	1 06	20	80	440
441	67	300	23,668	104,000	353 25	1 18	23	77	441
442	15	260	5,200	38,000	346 67	1 33	13	87	442
443	202	300	75,042	308,000	371 45	1 27	24	76	443
444	102	300	31,312	150,135	306 98	1 02	21	79	444
445	78	300	26,000	180,000	303 33	1 11	14	86	445
	1,516	Average 293	493,241	1,964,178	Average 345 26	Average 1 19	Average 26	Average 74	

BOOT AND SHOE FACTORIES.—TABLE NO. 19.

446	260	275	112,528	800,000	432 80	1 57	14	86	446
447	58	300	24,260	117,681	418 24	1 39	21	79	447
448	163	300	75,400	335,000	462 58	1 54	23	77	448
449	43	300	16,800	77,000	390 70	1 30	22	78	449
450	66	280	23,162	65,000	350 94	1 25	36	64	450
451	67	275	29,759	125,378	444 16	1 62	24	76	451
452	88	300	39,830	216,000	452 61	1 51	18	82	452
453	27	270	12,300	45,000	455 56	1 69	27	73	453
454	6	300	2,950	7,000	491 67	1 64	42	58	454
455	62	150	13,200	60,000	212 90	1 42	22	78	455
456	40	300	15,000	50,000	376 67	1 26	30	70	456
457	3	300	600	2,300	200 00	67	26	74	457
458	107	300	58,000	150,000	542 06	1 81	39	61	458
459	87	300	35,000	150,000	402 30	1 31	23	77	459
460	29	300	11,850	60,000	408 62	1 36	20	80	460
461	137	300	80,446	261,858	580 00	1 93	31	69	461
462	119	300	37,800	325,000	317 65	1 06	12	88	462
463	61	277	21,102	211,000	345 90	1 25	10	90	463
464	403	284	60,860	1,227,559	399 16	1 41	5	95	464
465	45	285	15,500	85,000	344 44	1 21	18	82	465
	1,871	Average 285	686,347	4,285,861	Average 401 45	Average 1 41	Average 23	Average 75	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

FURRIERS, HAT AND CAP FACTORIES—TABLE NO. 20.

Schedule No.	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.		%	
466	40	250	11,000	82,000	275 00	1 10	34	66	466
467	90	300	50,500	210,000	561 11	1 87	24	76	467
468	10	300	4,600	14,000	460 00	1 53	33	67	468
469	30	300	10,000	85,000	333 33	1 11	12	88	469
471	125	300	46,000	143,000	368 00	1 23	32	68	471
	295	Average 290	122,100	534,000	Average 399 49	Average 1 37	Average 27	Average 73	

TANNERIES, HARNESS FACTORIES, ETC.—TABLE NO. 21.

472	118	305	56,693	746,000	480 45	1 58	8	92	472
473	39	307	25,333	74,531	649 56	2 12	34	66	473
474	30	305	10,861	190,547	362 03	1 19	5	95	474
475	28	310	18,447	53,000	658 82	2 13	35	65	475
476	46	300	24,600	225,000	534 78	1 78	11	89	476
477	88	300	41,000	200,000	465 91	1 55	21	79	477
478	9	290	4,600	25,000	511 11	1 80	18	82	478
479	65	300	24,000	75,000	369 23	1 23	32	68	479
480	35	300	13,500	70,000	385 71	1 29	19	81	480
481	5	300	3,000	20,000	600 00	2 00	15	85	481
483	4	300	2,000	25,000	500 00	1 67	8	92	483
484	195	310	119,500	1,750,000	612 82	1 98	7	93	484
485	232	300	95,000	440,000	409 48	1 36	22	78	485
486	78	300	18,000	100,000	230 77	77	18	82	486
487	38	300	13,345	47,035	351 18	1 17	28	72	487
488	23	300	14,872	122,484	646 61	2 16	12	88	488
489	10	300	4,536	29,000	453 60	1 51	16	84	489
490	14	300	5,320	6,694	380 00	1 27	79	21	490
491	25	272	14,157	136,000	566 28	2 08	10	90	491
492	65	300	32,300	170,000	496 92	1 66	19	81	492
493	3	300	1,000	10,000	333 33	1 11	10	90	493
	1,130	Average 300	542,064	4,515,291	Average 476 12	Average 1 59	Average 20	Average 80	

FLOUR AND FEED MILLS, CEREAL FOODS.—TABLE NO. 22

494	57	300	25,800	600,000	452 63	1 51	4	96	494
495	4	290	2,184	35,000	548 00	1 89	6	94	495
497	20	300	12,000	50,000	600 00	2 00	24	76	497
498	25	312	18,770	365,000	750 80	2 41	5	95	498
499	7	307	4,080	150,000	582 86	1 90	3	97	499
500	46	304	24,248	330,040	526 96	1 73	8	92	500
501	6	307	2,900	122,000	483 33	1 57	3	97	501
502	10	313	9,000	250,000	900 00	2 88	4	96	502
503	5	306	2,332	46,408	466 40	1 52	5	95	503
504	13	300	5,800	100,000	446 15	1 49	6	94	504
506	10	300	6,861	126,000	686 10	2 29	5	95	506
507	35	263	19,616	408,950	564 57	2 15	5	95	507
508	76	300	34,144	167,354	449 26	1 50	20	80	508
509	10	300	7,600	240,000	760 00	2 53	3	97	509

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—*Continued.*FLOUR AND FEED MILLS, CEREAL FOODS.—TABLE NO. 22.—*Continued.*

Schedule No	Number of persons employed.	Number of days in operation	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
510	27	300	17,300	800,000	640 74	2 14	2	98	510
511	470	295	197,353	5,269,788	419 90	1 42	4	96	511
512	17	300	11,350	364,107	667 65	2 23	3	97	512
513	12	305	6,590	220,000	549 17	1 80	3	97	513
514	11	300	7,532	109,700	684 73	2 28	7	93	514
515	7	300	4,210	100,000	601 43	2 00	4	96	515
516	3	312	2,000	32,000	666 67	2 14	6	94	516
517	10	280	8,435	95,000	843 50	3 01	9	91	517
518	8	300	3,292	50,000	411 50	1 37	7	93	518
519	6	300	2,591	36,000	431 83	1 44	7	93	519
520	21	295	12,935	265,000	615 95	2 09	5	95	520
521	11	300	7,266	135,000	660 55	2 20	5	95	521
522	4	300	2,300	40,000	575 00	1 92	6	94	522
523	16	300	10,320	240,000	645 00	2 15	4	96	523
524	5	300	3,000	70,000	600 00	2 00	4	96	524
525	3	250	1,300	7,500	433 33	1 75	11	89	525
526	24	313	14,131	435,081	588 79	1 88	3	97	526
528	3	180	650	7,200	216 67	1 20	9	91	528
529	1	300	600	3,000	600 00	2 00	20	80	529
530	1	300	360	20,000	360 00	1 20	2	98	530
531	57	326	26,000	1,300,000	456 14	1 40	2	98	531
532	52	300	26,332	247,900	506 38	1 69	11	89	532
533	3	300	12,000	40,000	400 00	1 33	30	70	533
534	4	295	2,000	40,000	500 00	1 61	5	95	534
535	3	300	1,050	30,000	350 00	1 17	4	96	535
536	18	300	8,700	150,000	483 33	1 61	6	94	536
537	3	300	1,200	35,000	400 00	1 33	3	97	537
538	7	275	4,200	75,000	600 00	2 18	6	94	538
539	2	300	900	20,000	450 00	1 50	5	95	539
542	1	300	400	32,000	400 00	1 33	2	98	542
543	3	300	1,350	26,000	450 00	1 50	5	95	543
544	2	290	600	50,000	300 00	1 03	2	98	544
545	21	300	8,250	157,050	392 86	1 31	5	95	545
546	1	200	306	5,000	306 00	1 53	6	94	546
547	3	313	1,550	25,000	516 67	1 65	6	94	547
549	3	300	1,700	60,000	566 67	1 89	3	97	549
552	3	300	1,100	40,000	366 67	1 22	3	97	552
553	3	300	1,500	25,000	500 00	1 67	6	94	553
554	3	316	1,600	50,000	533 33	1 69	3	97	554
555	14	300	8,583	143,166	613 07	2 04	6	94	555
556	5	200	3,000	50,000	600 00	3 00	6	94	556
559	15	300	9,500	120,000	633 33	2 11	8	92	559
560	6	300	2,750	69,350	458 33	1 53	4	96	560
561	7	200	1,050	40,000	150 00	75	3	97	561
562	9	300	5,800	33,000	644 44	2 15	18	82	562
563	6	300	3,300	75,000	550 00	1 83	44	56	563
564	17	295	14,936	188,000	878 59	2 98	8	92	564
566	2	300	480	10,000	240 00	80	5	95	566
567	6	300	3,136	52,800	522 67	1 74	6	94	567
568	7	250	2,800	46,419	400 00	1 60	6	94	568
	1,254	average 297	644,873	14,626,213	average 524 95	average 1 79	average 7	average 93	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

BAKERS AND CONFECTIONERS.—TABLE NO. 23.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
569	181	300	98,500	600,000	544.20	1 81	16	84	569
570	366	300	125,000	700,000	341 63	1 14	18	82	570
571	33	300	21,100	102,000	639 39	2 13	21	79	571
572	70	300	42,826	199,163	611 80	2 04	22	78	572
573	99	300	31,171	250,000	314 86	1 05	12	88	573
574	10	300	3,000	20,000	300 00	1 00	15	85	574
575	79	300	24,640	110 000	311 90	1 04	22	78	575
576	53	300	24,378	133 000	459 96	1 53	18	82	576
577	157	292	52,736	449,614	335 90	1 15	12	88	577
578	25	275	12,000	40,000	480 00	1 75	30	70	578
578 ^a	55	300	35,668	159,865	648 51	2 16	22	78	578
	1,128	Average 297	471,019	2,763,642	Average 453 96	Average 1 53	Average 19	Average 81	

CANNING, PORK AND BACON FACTORIES.—TABLE NO. 24.

			\$	\$	\$ c.	\$ c.	%	%	
579	82	300	36,583	755,157	446 13	1 49	5	95	579
580	65	310	28,514	1,000,000	438 68	1 41	3	97	580
581	119	310	49,650	1,250,000	417 23	1 35	4	96	581
582	81	313	43,000	1,300,000	530 86	1 70	3	97	582
583	68	90	10,370	35,000	152 50	1 70	30	70	583
584	200	150	17,000	135,000	85 00	57	13	87	584
585	28	300	15,000	100,000	535 71	1 79	15	85	585
586	7	365	2,500	10,000	357 14	98	25	75	586
588	114	130	20,950	107,728	183 77	1 41	19	81	588
589	139	210	36,881	225,000	265 33	1 26	16	84	589
590	124	150	16,050	100,000	129 44	86	16	84	590
591	40	120	3,200	25,000	800 01	67	13	87	591
592	242	300	149,500	4,500,000	617 77	2 06	3	97	592
593	179	200	20,500	125,000	114 53	57	16	84	593
594	78	160	14,800	50,000	189 74	1 86	30	70	594
595	122	310	72,307	1,750,000	592 68	1 91	4	96	595
596	114	300	85,623	889,554	751 08	2 50	10	90	596
597	50	300	20,700	290,000	414 00	1 38	7	93	597
598	101	160	9,044	58,860	89 54	56	15	85	598
	1,953	Average 236	652,172	12,706,299	Average 310 85	Average 1 41	Average 13	Average 87	

DAIRY PRODUCTS AND OTHER FOODS.—TABLE NO. 25.

			\$	\$	\$ c.	\$ c.	%	%	
599	24	300	12,070	112,528	502 92	1 68	11	89	599
600	5	313	2,346	43,840	469 20	1 50	5	95	600
601	50	300	20,700	290,000	414 00	1 38	7	93	601
602	6	300	1,015	51,182	169 17	56	2	98	602
603	17	300	11,581	29,892	681 24	2 27	39	61	603
604	4	300	1,400	33,829	350 00	1 17	4	96	604
605	118	300	54,192	470,906	459 25	1 53	12	88	605

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued

DAIRY PRODUCTS AND OTHER FOODS.—TABLE NO. 25.—Continued.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.			
606	48	300	29,000	240,000	604 17	2 01	12	88	606
607	16	300	6,100	21,000	381 26	1 27	29	71	607
608	99	300	58,890	376,532	594 85	1 98	16	84	608
609	4	200	1,000	15,000	250 00	1 25	7	93	609
610	8	75	915	3,000	114 38	1 53	31	69	610
611	24	300	8,000	90,000	333 33	1 11	9	91	611
613	66	300	21,000	300,000	318 27	1 06	7	93	613
614	6	365	1,644	10,000	274 00	75	16	84	614
615	10	300	4,700	28,400	470 00	1 57	17	83	615
616	7	50	1,000	3,000	142 86	2 86	33	67	616
617	146	300	57,800	500,000	395 89	1 32	12	88	617
658	Average 272		293,353	2,619,109	Average 384 71	Average 1 49	Average 15	Average 85	

DISTILLERIES, BREWERIES, AND TOBACCO FACTORIES.—TABLE NO. 26.

618	10	75	2,830	15,000	283 00	3 77	12	88	618
619	29	313	24,456	160,000	843 31	2 69	15	85	619
620	9	313	6,800	26,400	755 56	2 40	26	74	620
621	16	313	5,400	30,000	337 50	1 08	18	82	621
622	5	365	2,100	8,000	420 00	1 15	16	84	622
623	5	300	2,000	5,300	400 00	1 33	38	62	623
624	10	365	10,000	25,000	1,000 00	2 74	40	60	624
625	4	300	2,944	13,000	736 00	2 45	23	77	625
626	12	300	7,000	24,000	583 33	1 94	29	71	626
627	221	293	118,399	1,321,871	535 70	1 83	9	91	627
628	17	300	10,955	78,720	644 41	2 15	14	86	628
629	35	300	22,475	64,000	642 14	2 14	35	65	629
630	7	90	975	3,000	139 29	1 55	32	68	630
631	7	300	3,850	20,000	550 00	1 83	19	81	631
632	16	312	9,000	75,000	562 50	1 80	12	88	632
633	14	300	4,000	16,000	285 71	95	25	75	633
634	38	300	23,200	110,000	610 53	2 04	21	79	634
635	62	300	32,750	90,000	528 23	1 76	36	64	635
636	98	300	30,000	90,000	306 12	1 02	33	67	636
637	210	300	170,387	430,000	811 37	2 70	40	60	637
638	202	313	117,252	416,000	580 46	1 85	28	72	638
639	337	300	233,747	785,875	693 61	2 31	30	70	639
640	12	313	11,400	60,000	950 00	3 04	19	81	640
641	6	305	5,000	25,500	833 33	2 73	20	80	641
642	114	300	37,500	150,000	328 95	1 10	25	75	642
643	118	306	63,238	398,000	535 91	1 75	16	84	643
644	16	306	13,060	64,000	816 25	2 67	20	80	644
645	14	300	5,546	34,996	396 14	1 32	16	84	645
646	59	300	34,000	80,000	576 44	1 92	42	58	646
647	48	333	32,912	182,936	685 67	2 06	18	82	647
1,751	Average 294		1,043,176	4,662,598	Average 579 05	Average 2 00	Average 24	Average 76	

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

CHEMICAL WORKS.—TABLE NO. 27.

Schedule No	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c	\$ c.	%	%	
648	6	300	4,666	40,000	777 78	2 59	12	88	648
649	3	300	3,050	8,000	1,016 67	3 39	38	62	649
650	703	365	326,490	650,000	464 42	1 27	50	50	650
651	4	300	2,316	17,000	579 00	1 93	14	86	651
652	18	275	12,810	40,197	711 70	2 59	32	68	652
653	31	300	25,000	80,000	806 45	2 69	31	69	653
654	164	365	129,620	230,000	790 37	2 17	56	44	654
655	1	205	200	6,000	200 00	.98	3	97	655
656	64	260	34,575	257,740	537 11	2 07	13	87	656
657	28	300	10,500	80,000	375 00	1 25	13	87	657
658	10	300	1,700	16,000	170 00	.57	11	89	658
659	11	300	5,700	53,055	518 18	1 73	11	89	659
660	200	300	90,000	175,000	450 00	1 50	51	49	660
661	127	300	47,981	296,035	377 80	1 26	16	84	661
1,370	Average	298	694,608	1,949,007	Average	Average	Average	Average	
					555 32	1 86	25	75	

OIL, PAINT AND VARNISH FACTORIES.—TABLE NO. 28.

662	37	310	21,400	150,000	578 65	1 87	14	86	662
663	8	312	4,676	40,000	584 50	1 87	12	88	663
664	12	300	9,492	40,000	791 00	2 64	24	76	664
665	49	280	25,600	650,000	522 65	1 87	4	96	665
666	5	306	2,410	18,000	482 00	1 58	13	87	666
667	95	300	45,253	183,000	476 35	1 59	25	75	667
669	15	305	13,735	115,840	915 67	3 00	16	84	669
670	8	300	5,285	117,775	673 12	2 24	5	95	670
671	11	300	3,200	27,000	533 33	1 78	12	88	671
672	20	300	8,100	100,000	405 00	1 35	8	92	672
673	34	305	14,902	141,827	438 29	1 44	11	89	673
674	61	300	39,939	335,157	654 74	2 15	12	88	674
675	42	300	41,520	250,000	988 57	3 29	17	83	675
392	Average	301	235,522	2,168,599	Average	Average	Average	Average	
					618 76	2 05	13	87	

GAS AND ELECTRIC LIGHT, HEAT AND POWER WORKS.—TABLE NO. 29.

676	121	365	65,947	192,775	545 02	1 49	34	66	676
677	145	365	111,965	445,273	772 17	2 12	25	75	677
678	900	365	526,000	2,069,498	584 45	1 60	25	75	678
679	26	365	15,700	70,000	603 85	1 65	22	78	679
681	11	365	6,456	42,069	586 91	1 61	15	85	681
682	4	365	3,000	7,805	750 00	2 05	38	62	682
683	55	365	28,735	95,000	522 45	1 43	38	62	683
684	5	365	2,630	10,900	526 00	1 44	24	76	684
685	3	365	1,077	4,022	359 00	.98	27	73	685
687	3	365	1,752	7,500	584 00	1 87	23	77	687
688	5	365	3,000	8,000	600 00	1 64	37	63	688
689	16	365	8,300	15,000	518 75	1 42	55	45	689
690	4	365	1,925	4,000	481 25	1 32	48	52	690

TABLE SHOWING WAGES AND SALARIES AND SHARE OF PRODUCT.—Continued.

GAS AND ELECTRIC LIGHT, ETC.—TABLE No. 29—Continued.

Schedule No.	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
691	8	365	4,260	40,000	532 25	1 46	11	89	691
692	9	365	7,812	15,000	868 00	2 38	52	48	692
693	8	365	4,411	9,000	551 38	1 51	49	51	693
694	2	365	850	4,629	425 00	1 16	18	82	694
695	5	365	2,284	5,200	456 80	1 25	44	56	695
696	33	365	20,344	190,000	616 48	1 69	11	89	696
697	6	365	2,596	15,966	435 17	1 19	16	84	697
698	13	365	8,573	102,000	659 46	1 81	9	91	698
699	3	365	1,380	5,000	460 00	1 26	18	82	699
700	3	365	2,200	8,000	733 33	2 01	27	73	700
701	9	365	2,100	5,900	233 33	61	36	64	701
702	3	365	900	5,500	300 00	82	16	84	702
	1,400	Average 365	834,597	3,362,037	Average 548 24	Average 1 51	Average 29	Average 71	

PRINTING AND ALLIED TRADES.—TABLE No. 30.

703	10	301	4,588	7,700	458 80	1 50	62	38	703
704	130	300	46,700	150,000	359 23	1 20	31	69	704
705	18	300	12,504	24,066	694 67	2 32	52	48	705
706	12	305	8,411	17,511	700 92	2 30	48	52	706
708	158	305	67,360	253,874	426 33	1 40	22	78	708
709	51	300	25,200	70,000	494 12	1 65	36	64	709
710	114	310	76,320	225,000	669 47	2 16	34	66	710
711	64	300	40,357	114,375	630 58	2 10	35	65	711
712	2	312	550	3,500	275 00	88	16	84	712
713	5	303	1,850	3,850	370 00	1 22	48	52	713
714	110	300	30,000	62,578	272 73	91	48	52	714
715	34	310	24,100	32,000	708 82	2 25	75	25	715
716	7	300	2,650	6,250	378 57	1 26	42	58	716
717	35	312	22,293	42,000	636 94	2 04	53	47	717
718	3	305	1,145	14,000	381 67	1 25	29	71	718
719	10	305	3,684	4,000	308 40	1 01	77	23	719
720	99	300	51,150	172,916	516 67	1 72	30	70	720
721	280	312	234,307	560,000	836 81	2 68	42	58	721
722	14	300	13,160	35,000	940 30	3 13	38	62	722
723	21	300	10,640	25,000	506 67	1 69	43	57	723
724	25	300	18,515	41,663	740 60	2 47	44	56	724
725	7	300	2,800	3,600	400 00	1 33	78	22	725
726	104	312	80,000	146,000	769 23	2 47	55	45	726
727	50	300	29,700	120,000	594 00	1 98	25	75	727
728	18	306	14,324	39,187	795 78	2 60	37	63	728
	1,381	Average 304	831,715	2,574,070	Average 554 48	Average 1 82	Average 44	Average 56	

BRICK, TILE AND PORTLAND CEMENT WORKS.—TABLE No 31.

729	69	210	23,014	148,732	333 55	1 59	15	85	729
730	105	228	53,089	391,215	505 61	2 22	14	86	730
731	9	300	3,586	9,630	398 45	1 33	37	63	731
732	23	300	12,709	23,913	552 57	1 84	53	47	732
733	11	140	1,923	6,300	174 82	1 24	31	69	733
734	153	312	99,912	149,955	653 01	2 09	67	33	734
735	28	365	15,435	50,107	551 25	1 51	31	69	735

TABLES SHOWING WAGES AND SALARIES AND SHARE PRODUCT.—*Concluded.*

BRICK, TILE, ETC.—TABLE NO. 31—*Continued.*

Schedule No.	Number of persons employed.	Number of days in operation.	Amount paid in wages and salaries.	Gross value of product.	Employees' average annual earnings.	Employees' daily rate of pay.	Per cent. wages of gross value of product.	Per cent. cost of material, interest, insurance, taxes, etc., and profit.	Schedule No.
			\$	\$	\$ c.	\$ c.	%	%	
736	8	264	4,616	8,185	577 00	2 19	56	44	736
737	18	300	9,000	10,500	500 00	1 67	86	14	737
738	9	300	5,500	16,000	611 11	2 04	34	66	738
739	6	120	1,200	3,400	200 00	1 67	35	65	739
740	16	225	7,548	18,094	471 75	2 10	42	58	740
741	21	170	10,000	30,000	476 19	2 78	33	67	741
742	166	294	50,100	75,830	603 61	1 05	66	34	742
743	8	300	4,000	10,000	500 00	1 67	40	60	743
744	30	150	7,642	16,249	254 73	1 70	47	53	744
745	27	300	17,233	49,926	628 26	2 09	35	65	745
747	54	275	26,000	95,000	481 48	1 75	27	73	747
750	4	300	1,872	6,125	490 50	1 63	31	69	750
751	34	300	27,480	48,000	808 24	2 69	57	43	751
753	53	200	27,350	100,000	516 04	2 58	27	73	753
754	412	300	72,741	109,391	176 56	59	67	33	754
	1,264	Average 257	481,950	1,376,552	Average 475 67	Average 1 82	Average 42	Average 58	

MISCELLANEOUS INDUSTRIES—TABLE NO. 32.

755	67	300	10,900	65,000	162 69	54	17	83	755
756	68	300	18,000	100,000	264 71	88	18	82	756
757	30	313	21,013	83,134	700 43	2 23	25	75	757
758	29	300	15,200	33,448	524 14	1 75	45	55	758
	194	Average 303	65,113	281,582	Average 412 99	Average 1 63	Average 26	Average 74	

SUMMARY OF 32 TABLES.

51,095	Average 290	23,361,134	122,726,571	Average 467 80	Average 1 64	Average 26.68	Average 73.32
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INCREASE OR DECREASE OF PRODUCT AND OF WAGES.

The following figures, calculated from the preceding tables, show the average increase or decrease in value of product reported by each classified industry, and the number of establishments reporting unspecified increases or decreases, or no change from the previous year. Succeeding columns show the average increases in wages as stated in the schedules and the number of establishments reporting unspecified increases or decreases or no change. The concluding column gives the number of persons in the establishments reporting the increases in wages.

INCREASE OR DECREASE OF PRODUCT AND OF WAGES.

No.	Industries.	Production.					Wages.					Number benefited.
		Average increase.	Average decrease.	Increase not specified.	Decrease not specified.	Same amount.	Average increase.	Average decrease.	Increase not specified.	Decrease not specified.	Same rate of wages.	
		%	%	No.	No.	No.	%	%	No.	No.	No.	No.
1	Lumber, Saw Mills		19.3	2	2	23	10.3			3	27	2,187
2	Planing Mills, etc.	12.8		3	1	8	7.4		7		10	1,043
3	Woodenware specialties	15.4		3		11	8.1		3		11	1,516
4	Furniture, etc.	18.6		5		4	18.6		5		4	2,649
5	Carriages, etc.	25.9		2		5	10.8		1		8	1,388
6	Agricultural Implements	24.7		2	2	4	9.6			1	4	969
7	Pianos, Organs, etc.	23.1		1	1	1	4.3		3		1	281
8	Wood Pulp and Paper	28.4		2	1	7	10.2		2		6	763
9	Foundries, Rolling Mills, etc.	21.7		1		4	10.5				12	232
10	Stove Factories.	38.9		2		2	8.8		1		6	833
11	Machinery, etc.	11.4		2	4	8	8.9		5	2	12	1,712
12	Metallic Roofing, etc.	16.9		3		3	11.1		1		6	885
13	Wire Goods	16.6			1	3	10.0				5	394
14	Brassware	6.9		1	1	2	8.4		4		2	2,660
15	Silverware	21.4				1	13.4					320
16	Woollens, Cottons, etc.	6.5		5	2	9	10.0		4	1	10	595
17	Knitted Goods	23.7			1	1	18.8		3		7	1,129
18	Clothing, etc.	12.9		1	1	1	8.0		2		4	692
19	Boots and Shoes	28.9				4	6.1		1		7	1,240
20	Furs, Hats and Caps	15.8					9.0				3	158
21	Tanneries, Leather Goods	13.5		2		4	9.0		1		5	940
22	Flour Mills, etc.		6	4	2	33	9.2		5		32	760
23	Bakeries, etc.	12.2		1		3	8.0				1	585
24	Canning, Pork Packing, etc.	4.6				2	12.5		2		6	1,020
25	Dairy Products, etc.	17.2		1			9.0		3		5	552
26	Distillers, Brewers, Cigars, etc.	6.1		1		7	7.7		1		7	1,115
27	Chemical Works, etc.	7.9		1	1	1	10.0		1		6	424
28	Oils, Paints, etc.	10.0			1	4	10.4		1		3	680
29	Gas, Electric Works, etc.	10.6		1		1	7.9		1		8	1,290
30	Printing, etc.	11.0		1		1	7.0		6		5	1,346
31	Bricks, Cement, etc.	78.1		3		7	9.4		1		10	346
32	Miscellaneous	20.0			2		12.0		1			141
	Totals and averages	aver 18.72	aver 9.9	50	23	164	aver 9.83	aver	65	7	233	30,845

CHANGES OF WAGES AND HOURS.

Basket makers at Stony Creek secured summer rates two months earlier than usual.

Billiard factory employees at Toronto, to the number of 42, had their wages increased 5 per cent.

Brewery workers, to the number of 34, received increase of \$1 per week, from July 1.

Brewery workers, to the number of 85, at Hamilton, received increase of \$1 per week and reduction from 59 to 50 hours.

Brewery workers at Berlin, to the number of 70, received increase of \$1 per week and reduction from 59 hours by one in summer and two in winter.

Brewery workers at Toronto, by new schedule, secured advances ranging from \$1.25 to \$1.50 per week and a reduction of 2½ hours.

Bricklayers and masons, to the number of 100, at Berlin, received a reduction in hours from 54 to 48.

Bricklayers, to the number of 78, at Brantford, received advance from 45c. to 48c. per hour.

Bricklayers and masons at Guelph, to the number of 40, received increase from 43c. to 48½c. from March 1.

Bricklayers and masons at Ottawa, to the number of 400, received an advance from 50c. to 52c. per hour and reduction from 9 to 8 hours.

Bricklayers and masons at St. Thomas, to the number of 40, received an increase of 2c. per hour.

Bricklayers, to the number of 1,500, at Toronto, made an agreement for an increase from 50c. to 52c. per hour in 1911 and 1912, and 55c. per hour in 1913.

Builders' labourers, to the number of 150, at Berlin, received an increase of 2c. per hour and a reduction from 9 to 8 hours.

Builders' labourers, to the number of 225, at Ottawa, received an advance from 25c. to 28c. per hour and a reduction from 50 to 44 hours.

Broom tyers in Toronto received an increase of \$3 per week from June 1.

Carpenters and machine hands, to the number of 40, at Berlin, received an increase of 10c. per day.

Carpenters, to the number of 300, at Hamilton, obtained an increase from 35c. to 40c. per hour, in May and June.

Carpenters, numbering from 3,500 to 4,000, at Toronto, secured an advance from 35c. to 37c. per hour from May 1.

Carpenters at Welland received an increase of minimum scale from 30c. to 35c. per hour.

Carters, to the number of 60, employed by the City at Ottawa, obtained a raise from \$2.50 to \$2.70 per day for man, horse and cart.

Civic employees at Niagara Falls received various increases.

Civic labourers, to the number of 500, at Ottawa, obtained an increase from \$1.80 to \$1.98 per day of 9 hours.

Civic labourers and other employees at Toronto got various increases.

Corporation labourers, to the number of 60, at Berlin, received an advance of 20c. per day.

C.P.R. shop employees received increases of 8 and 10 per cent.

Electric furnace tenders, to the number of 20, at Niagara Falls, received an increase from 25c. to 27½c. per hour.

Electric linemen, to the number of 400, at Toronto, received increases from 31c. to 33½c.; from 28c. to 30½c.; and from 25c. to 27½c. per hour.

Electrical workers at Hamilton, to the number of 65, received an increase of 5c. per hour, from \$16.20 to \$18.90 per week.

Employees of Somerville Paper Box Co. obtained for 55 hours the same as they had previously received for 60 hours.

Firemen at Brantford received substantial increases from March 15.

Firemen at Chatham had their pay increased by \$20 per year from Feb. 1.

Firemen at London to the number of 34 received advances.

Firemen at Ottawa, to the number of 80, obtained an increase of \$50 per year from Jan. 1.

Firemen at Peterborough received an increase of \$25 from April 1.

Firemen at St. Thomas received an advance from April 1.

Freight handlers, to the number of 20, at Ottawa, received an increase of 10c. per day.

Gas Co. employees at Toronto received increases from \$2.25 to \$2.40 per day for inside men, and from \$2 to \$2.10 per day for outside men.

Horseshoers at Stratford received an increase from 35c. to 40c.

Iron moulders at Guelph obtained an increase of 25c. per day.

Iron moulders at London, to the number of 33, had their hours reduced from 10 to 9 at the same wages.

Iron moulders at Ottawa, to the number of 30, received an advance from \$2.50 to \$2.75 per day from Jan. 1.

Iron moulders and core makers, to the number of 267, at Toronto, received an advance from \$15.00 to \$16.75 for core makers, and \$16.75 to \$17.25 for moulders.

Labourers in malleable iron shops at Smith's Falls, to the number of 200, received an increase of 5c. per day.

Machinists of the M.C.R. at St. Thomas, to the number of 75, were given an increase from 31½c. to 34½c. per hour from Feb. 1.

Maintenance of Way Employees on the C.P.R., to the number of 200, received an increase of 15c. per day for trackmen and bridgemen, and \$5 per month for pump men and signal men.

Motormen and conductors at Guelph, to the number of 25, received an increase of 1c. per hour.

Painters and paperhangers, to the number of 100, at Ottawa, received an advance of 3c. per hour from April 1.

Paper box workers at London obtained a reduction of hours from 60 to 55 at the same wages.

Papermakers, to the number of 45, at Ottawa, had their hours reduced from 11 and 13, to 8 per day.

Patternmakers at Peterborough received increases.

Pipelayers at Ottawa, to the number of 30, received an increase of 25c. per day.

Plasterers' labourers at Ottawa, to the number of 50, received an increase of 3c. per hour.

Plasterers' labourers at Toronto, to the number of 200, secured an advance from 30½c. per hour from May 1.

Plumbers and steamfitters at Berlin to the number of 14 had their hours reduced by 5.

Plumbers and steamfitters to the number of 60 at Hamilton received an advance from \$16.50 to \$17.60 per week.

Plumbers, steamfitters and tinsmiths to the number of 31 at St. Catharines received an increase from 30c. to 35c. per hour, and assistants from 15c. to 25c. per hour.

Policemen at Brantford received increases from May 1.

Policemen at Chatham received increases of \$5 per month from Feb 1.

Policemen at Toronto received increases from Jan. 1.

Policemen at Windsor received advance from \$750 to \$775 per year from Jan. 1.

Printers at Fort William received increases.

Printers at Port Arthur received increases.

Public Library employees at Hamilton to the number of 11 received an advance of 50c. per week.

Sheet metal workers to the number of 70 at Ottawa received an advance from 30c. to 35c. per hour from Jan. 1.

Sheet metal workers at Port Arthur and Fort William obtained an increase of 5c. per hour.

Stonecutters to the number of 400, at Toronto, made an agreement for an increase from 50c. to 52½c. per hour for the season of 1912.

Stonemasons at Ottawa received an advance of 2c. per hour.

Stonemasons at Toronto, to the number of 700, secured an advance from 50c. to 52½c. an hour from May 1.

Street labourers at Ottawa, to the number of 150, under the Ottawa Improvement Commission, received an increase of 10c. per day.

Street Railway men at Kingston received increases from \$1.50 per day to \$1.55 for new men, and \$1.70 per day for old employees.

Street Railway men at London received increases of 1c and 2c per hour.

Teamsters at Hamilton received an increase from 40c. to 45c. per hour.

Telephone operators, to the number of 197, at Ottawa, received increases.

Woodworkers, to the number of 42, at Toronto, received advances of 5 per cent. from an average of 27c. per hour.

AMERICAN FEDERATION OF LABOUR.

Mr. Frank Morrison, Secretary of the American Federation of Labour, in his thirty-first report, presented at the annual convention of that body held at Atlanta, Georgia, gives statistics for the past year. These figures are of interest to wage earners and others of Ontario, as showing the movements, changes of wages, hours of labour, benefits distributed, etc., by the International Trades and Labour Unions of the United States and Canada.

Mr. Morrison says.—

CHARTERS—Reports from the Secretaries of 85 of our National and International organizations furnish us with the information that 2,345 charters have been issued during the past year and 1,358 surrendered—1,129 of the charters surrendered were locals of the National and International unions, and 229 affiliated direct with the American Federation of Labor.

GAIN IN MEMBERSHIP—The gain in membership reported by the Secretaries of 63 International organizations over the membership on the first of September last year is 117,596.

STRIKES—Reports from 74 National and International organizations and from local unions directly affiliated with the American Federation of Labor show that there were 1,359 strikes, in which there were 170,526 involved. Of that number 104,655 were benefited and 16,179 not benefited. The total cost of the strikes reported on was \$4,709,550.69. Adding to that amount \$173,302.06, donations made by local unions to other unions, we have a grand total of \$4,882,852.75 expended to sustain members on strike during the past year.

The following tables are from Mr. Morrison's report:

CHARTERS, MEMBERSHIP, STRIKES, ETC

Organizations.	Charters issued	Charters surrendered.	Gain in membership.	Number of strikes.	Strikes won.	Strikes compromised.	Strikes pending.	Strikes lost.	Number involved.	Number benefited.	Not benefited.	Reduction in hours per day.	Gain in wages.	Cost of strikes.	Donations to other unions.
A. F. of L. directly affiliated locals.	262	229	5,799	16	6	6	2	2	711	419				\$ 4,525 70	\$5,703 57
Asbestos Workers	3	1	200	1			1		35					25,512 00	11,000 00
Bakers	38	8	1,734	12	8		4		1,250			$\frac{1}{2}$ hour	10%	12,200 00	
Barbers	42	19	2,012	4	4				561	561		$\frac{1}{2}$ hour	40c*	800 00	
Bill Posters	1		10	4	3				200	180	20	2	33c*		
Blacksmiths	45	12		6	6		1	1	1,800				2c†	13,000 00	
Boiler-makers	40	40		84	41	3	25	15	2,864	1,229	472		22c*	115,022 15	705 60
Bookbinders	11	2	124	12	5		7							12,273 50	
Boot and Shoe Workers	8	6		8					212	5,000				72,011 00	16,304 00
Brewery Workmen	10	14	3,052	34	19	10	3	2						811 27	12,000 00
Brick, Tile and Terra Cotta Wkrs.	5	17		3	2	2	1	1	2,900						
Bridge and Structural Iron Wkrs.	11	3	1,300	3	2	1									
Broom-makers				7	5		1	1	200			1	40c*		
Brush-makers			26											3,000 00	700 00
Carpenters, Brotherhood	158	154	8,764	38	15	20		3	8,000	7,000	1,000	1	2 $\frac{1}{2}$ to 5c.†	249,177 20	125 00
Carpenters, Amalgamated	24	4	650											3,364 97	2,114 00
Carriage and Wagon Workers	8	2	1,100	4	3			1	1,000	920	80		20c*	400 00	
Carvers, Wood				6	2			4	260	100	160		40c.α	11,620 81	
**Car Workers			3,500												
Cement Workers	20	8													
Cigarmakers	11	14		56	24	3	21	8	9,664	3,395	85			221,044 70	
Clerks, Retail	69													15,769 46	
Cloth Hat and Cap Makers	4	1	178	26	17		1	8	434	307	127				200 00
Commercial Telegraphers															
**Compressed Air Workers															
Coopers	12	6	300											2,716 85	
Curtain Operatives, Lace	3		97												
**Cutting Die and Cutter Makers															
Electrical Workers	31	5	4,500	6	6					7,000			30c*	12,000 00	90 00
Elevator Constructors	4		68	2	1	1			1,800	1,800			25c.*h		
Engineers, Steam	46	6	500	18	8	3		7	286	71	15a	2 to 4	50c. to 1.50*	2,302 50	
Engravers, Watch Case															200 00
Firemen, Stationary	14	4	5,000	4	3	1			217	217		4 $\frac{1}{2}$	24c.	3,700 00	4,200 00

[illegible]

CHARTERS, MEMBERSHIP, STRIKES, ETC.—Continued.

Organizations.	Charters issued.	Charters surrendered.	Gain in membership.	Number of strikes.	Strikes won.	Strikes compromised.	Strikes pending.	Strikes lost.	Number involved.	Number benefited.	Not benefited.	Reduction in hours per day.	Gain in wages.	Cost of strikes.	Donations to other unions.
Plasterers	49	20	.....	m 3	.....	.....	2	1	800	700	.....	.....	.....	2,400 00	.....
Plumbers	55	15	.....	108	37	3	65	3	.....	.....	.....	.....	.....	66,318 00	.....
Post-office Clerks .....	.....	.....	.....	300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Potters	2	.....	584	.....	1	.....	1	1	121	.....	.....	.....	.....	.....	700 00
Powder & High Explosive Workers	1	.....	32	d 1	.....	.....	1	.....	32	.....	.....	.....	.....	5,382 76	1 00
Print Cutters.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	140 00
Printing Pressmen.....	36	4	1,460	3	2	.....	1	.....	125	115	10	.....	.....	82,000 00	9,400 00
Pulp and Sulphite Workers.....	4	.....	300	3	.....	.....	2	1	500	.....	.....	.....	.....	1,500 00	150 00
Quarry Workers.....	9	1	.....	9	9	.....	.....	.....	600	600	.....	1	32c.	4,137 00	.....
Railroad Telegraphers	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Railroad Carmen.....	124	34	9,592	1	.....	.....	.....	1	.....	.....	.....	.....	.....	42,034 99	.....
**Railway Clerks .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Railway Employees, Street	25	4	2,000	18	12	.....	4	2	10,000	9,000	1,000	.....	.....	24,875 00	10,169 54
Roofers, Composition.....	5	1	145	3	1	1	1	1	212	200	12	1	40c.	.....	500 00
Sawsmiths .....	.....	.....	.....	1	.....	.....	1	.....	75	.....	.....	.....	.....	.....	.....
Seamen.....	.....	1	.....	2	1	.....	1	.....	12,000	6,000	6,000	.....	.....	18,000 00	.....
Shingle Weavers.....	3	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	500 00
Slate and Tile Roofers	2	4	50	3	3	.....	.....	.....	150	150	.....	.....	25%	.....	.....
Slate Workers.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....
Spinners .....	.....	.....	.....	2	1	.....	1	.....	200	100	100	.....	.....	500 00	800 00
Stage Employes .....	.....	.....	.....	60	54	1	5	.....	4,500	4,200	.....	.....	.....	3,500 00	3,500 00
Steel Plate Transferrers.....	41	1	11,000	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17 00
Stereotypers and Electrotypers...	7	.....	267	6	4	.....	2	.....	61	61	.....	.....	.....	1,004 25	.....
Stonecutters.....	24	2	2,000	66	66	.....	.....	.....	2,650	2,650	.....	.....	.....	960 50	.....
Stove Mounters.....	1	1	271	6	3	.....	3	.....	119	47	72	.....	.....	4,670 00	89 00
Switchmen.....	9	3	69	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tailors.....	20	13	.....	18	7	1	5	5	320	139	30	.....	20c.*	9,901 00	2,324 65
Teamsters.....	100	64	1,666	8	7	.....	.....	1	244	224	.....	k	.....	9,777 00	2,128 90
Textile Workers.....	29	13	.....	3	.....	1	1	1	225	.....	.....	.....	.....	10,000 00	.....
Tile Layers.....	5	.....	145	2	1	.....	1	1	100	60	.....	.....	37½c.	1,000 00	500 00

**BENEFITS PAID TO MEMBERS BY INTERNATIONAL ORGANIZATIONS DURING
THE PAST YEAR.**

Organizations.	Death benefits	Death benefits members' wives.	Sick benefits.	Traveling benefits.	Tool in- surance.	Unem- ployed benefits.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
A. F. of L. locals	2,814 00	75 00	4,076 56	905 04		744 00
Bakers	1,847 85	500 00	17,499 25			+50,000 00
Barbers	24,955 00		40,886 00			
Boilermakers	3,500 00					
Bookbinders	4,450 00					
Boot and Shoe Workers..	11,500 00		75,402 08			
Brick, Tile & Terra Cotta Workers.....	400 00					
Bridge and Structural Iron Workers.....	12,300 00					
Broom Makers	2,000 00		1,000 00			
Brushmakers	100 00			125 00		
Carpenters, Brotherhood.	279,107 07	34,775 00				
Carpenters, Amalgamated	1,450 00		8,970 83	150 25	3,629 00	28,899 61
Carriage & Wagon Workers	1,050 00					
Carvers, Wood.....	2,750 00				1,040 00	
Cigarmakers	226,717 53		189,438 59	39,828 77		39,917 00
Clerks, Retail.....	10,410 00		25,690 00			
Coopers.....	3,150 00					
Curtain Operatives, Lace.	2,900 00	200 00				
Cutting Die & Cuttermkrs.	375 00					
Electrical Workers	11,300 00					
Engravers, Watch Case ..			157 00			
Firemen, Stationery	6,500 00	1,250 00	840 00			
Fitters, Steam.....	2,500 00					
Foundry Employes	250 00		485 00			
Glass Bottle Blowers.....	53,664 60					12,854 00
Glass Work'rs, Amalg'm'd	425 00					
Hatters.....	58,164 09					
Hodcarriers.....	3,150 00					
Hotel and Rest. Emp.....	41,135 78		34,345 75			
Iron and Steel Workers ..	3,350 00	700 00	8,130 00			
Jewelry Workers			56 00			
Lathers	5,900 00					
Lithographers.....	12,300 00					
Lithographic Pressfeeders	300 00					
Machinists	55,110 00					
Meat Cutters and But.Wk.	1,550 00					
Metal Polishers	5,350 00					
Metal Workers, Sheet ...	11,400 00					
Miners, Western Fed. of..	32,711 90		136,429 21			
Moulders	72,448 85		156,791 60			25,866 00
Painters	90,125 00	11,075 00	12,675 00			
Patternmakers	2,800 00		5,170 32		979 70	4,200 50
Paving Cutters.....	3,200 00					
Photo-Engravers	2,125 00		5,355 14			27,414 00
Piano and Organ Workers	2,100 00	400 00	3,987 56			1,209 60
Plasterers	18,450 00					
Plate Printers	2,000 00					
Plumbers.....	12,800 00		38,960 00			
Potters	4,325 00					
Powder & High Ex.Wkrs.						68 00
Print Cutters	1,000 00					
Printing Pressmen.....	18,500 00					
Pulp, Sulphite and Paper Mill Workers						1,000 00
Quarry Workers	850 00					
Railroad Telegraphers...	92,500 00					

**BENEFITS PAID TO MEMBERS BY INTERNATIONAL ORGANIZATIONS DURING
THE PAST YEAR.—*Concluded.***

Organizations.—<i>Concluded</i>	Death benefits.	Death benefits members' wives.	Sick benefits.	Traveling benefits.	Total insurance.	Unem- ployed benefits.
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Railway Carmen.....	3,217 00					
Railway Employes, Street	24,300 00		20,452 17			
Roofers, Composition....	2,500 00		1,000 00			
Shingle Weavers	1,185 00					
Slate and Tile Roofers...	1,100 00					
Slate Workers.....	250 00	50 00				
Spinners.....	600 00	100 00				20,000 00
Stage Employes	4,000 00	800 00		2,000 00		6,000 00
Steel Plate Transferrers.				20 00		
Stereotypers & Electrot'rs	4,700 00					
Stonecutters	16,000 00					
Stove Mounters	1,300 00					
Switchmen.....	129,367 50					
Tailors	11,027 70		21,196 35			
Textile Workers	385 00					
Tip Printers						50 00
Tobacco Workers.....	950 00		5,993 00			
Travelers' Goods & Lea.						
Novelty Workers			300 00			
Tunnel and Subway Con..	1,600 00		500 00	1,600 00		500 00
Typographical Union....	47,920 00					
Weavers, Elastic Goring .	200 00					20 00
Weavers, Wire	500 00		768 65			
White Rats Actors.....	217 50		2,000 82	14,155 65		
Totals	1,471,381 37	49,925 00	818,556 88	58,784 71	5,648 70	218,742 71

†Paid locally. *See top of following page for further information.

AVERAGE PAID UP MEMBERSHIP.

Year.	No.
1897	264,825
1898	278,016
1899	349,422
1900	548,321
1901	787,537
1902	1,024,399
1903	1,465,800
1904	1,676,200
1905	1,494,300
1906	1,454,200
1907	1,538,970
1908	1,586,885
1909	1,482,872
1910	1,562,112
1911	1,756,735

THE LAWS RELATING TO LABOUR—CHRONOLOGY OF ONTARIO LABOUR LAWS.

Apprentices' and Minors' Act. Passed, 1871. Amended, 1874. Cap. 161, R.S.O. 1897, 1911.

Mechanics' and Wage-earners' Liens. Passed, 1873. Amended, 1874, 1878, 1882, 1884, 1887, 1890, 1896, 1897. Cap. 153, R.S.O., 1897, 1901, 1902, 1904. Consolidated and amended 1910. Previous Act repealed.

Master and Servant Act. Passed, 1873. Amended, 1886. Cap. 157, R.S.O., 1897, 1901, 1904, 1908. Consolidated and amended 1910. Previous Act repealed.

Immigration Aid Societies Act. Passed, 1873. Cap. 212, R.S.O., 1897, 1904, repealed 1905.

Act to Facilitate the Adjustment of Disputes between Masters and Workmen. Passed, 1873. Cap. 159, R.S.O., 1897.

Act Respecting Innkeepers. Passed, 1874. Amended, 1882. Cap. 187, R.S.O., 1897, 1904, 1907.

Act Respecting Public Meetings, Cap. 230, R.S.O., 1897.

Act Respecting Threshing Machines. Passed, 1874. Cap. 265, R.S.O., 1897.

Act Respecting Co-operative Associations. Passed, 1880. Amended, 1884. Cap. 202, R.S.O., 1897, 1904, 1905, repealed 1907 (see Companies' Act).

Act Respecting Safety of Railway Employees. Passed, 1881. Cap. 207, R.S.O., 1897.

Act Respecting Accidents to Employees on Railways. Passed, 1881. Cap. 266, R.S.O., 1897.

Bureau of Industries. Established, 1882.

Act Respecting Pawnbrokers. Passed 1884. Cap. 188, R.S.O., 1897, 1907. Consolidated, 1911. Old Act repealed.

Factories Act. Passed, 1884. Amended, 1887, 1889, 1895. Cap. 246, R.S.O., 1897. Further amended, 1901, 1902, 1903, 1904, 1905, 1908, 1911.

Act Respecting Wages. Passed, 1888. Cap. 156, R.S.O., 1897, 1899. Consolidated and amended 1910. Previous Act repealed.

Workmen's Compensation for Injuries Act. Passed, 1886. Amended, 1887, 1893, 1896, 1899. Cap. 160, R.S.O., 1897.

Lord's Day Observance Act. Passed, 1885. Cap. 246, R.S.O., 1897, 1903, 1904.

Shops Regulation Act. Passed, 1888. Amended, 1889-1897. Cap. 257, R.S.O., 1897. Further amended, 1900, 1901, 1903, 1904, 1908.

Egress from Public Buildings Act. Passed, 1888. Cap. 263, R.S.O., 1897.

Trades Disputes Act. Passed, 1890. Amended, 1894, 1897. Cap. 158, R.S.O., 1897. Further amended, 1902. Consolidated and amended 1910. Previous Act repealed.

Woodmen's Lien Act. Passed 1891. Amended, 1894, 1896, 1897, 1899. Cap. 154, R.S.O., 1897, 1903. Consolidated and amended 1910. Previous Act repealed.

Act Respecting Stationary Engineers. Passed 1891. Cap. 185, R.S.O., 1897, 1906, 1907, 1908, 1909. Consolidated and amended 1911. Previous Act repealed.

Miners' Act. Passed, 1892. Cap. 36, R.S.O., 1897, 1905, repealed 1906.

Matters under Municipal Act. 1892, 1893, 1894, 1895, 1898. Cap. 223, R.S.O., 1897, 1904, 1905, 1906.

Insurance by Trade Unions. Passed, 1892. Amended, 1897. Cap. 203, R.S.O., 1897.

Act Respecting School for Artisans. Passed, 1892. Amended, 1895. Cap. 223, R.S.O., 1897.

Act Respecting Truancy and Compulsory School Attendance. R.S.O., Cap. 196, 1897. Amended 1904. New revised Act repealing this, 1909.

Act Respecting Lien for Wages on Street Railways. Passed, 1895. Cap. 208, R.S.O., 1897, 1906. (See Railway Act.)

Labour on Public Works. Passed, 1896. Amended, 1897. Cap. 155, R.S.O., 1897, 1900. Consolidated and Amended 1910. Previous Act repealed.

Act Respecting Liability of Directors' Companies for Wages. Passed, 1896. Sec. 85, Cap. 191, R.S.O., 1897. Repealed, 1907. (See Companies' Act.)

Act Respecting Liability of Mining Companies for Wages. Passed, 1896. Cap. 197, R.S.O., 1897, 1906. (See Mines Act.)

Act Respecting Technical Schools. Passed, 1897. Amended, 1911. Previous Act repealed.

Act Respecting Immigration of Children. Passed, 1897. Cap. 262, R.S.O., 1897.

Resolution Respecting Fair Wages on Public Works. Passed, 1900.

Act Creating Bureau of Labor. Passed, 1900. Revised 1910. (See below.)

Act Respecting Mines. Passed, 1906, 1908, 1909, 1911.

Act Respecting Steam, Electric and Street Railways. Passed, 1906.

Act for Appointment of Railway and Municipal Board. (Trade Disputes provisions.) Passed, 1906. Amended, 1907.

Act Respecting Joint Stock and Other Companies. Passed, 1907.

Act Respecting the Manufacture and Sale of Bread. Passed, 1908.

Stenographic Reporters' Act. Consolidated, 1911. Old Act repealed.

Building Trades Protection Act. Passed, 1911.

AN ACT RESPECTING THE BUREAU OF LABOUR.

S. O. 1910, CAP. 13. *Assented to 7th March, 1910.*

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:

1. This Act may be cited as the **Bureau of Labour Act**.
2. There shall be attached to the Department of the Commissioner of Public Works a bureau, to be styled "**The Bureau of Labour**."
3. The Lieutenant-Governor may appoint a Secretary of the said Bureau and may also appoint such other officers as may be necessary for the proper conduct of the Bureau.
4. It shall be the duty of the Bureau to collect, assort and systematize and publish information and statistics relating to employment, wages and hours of labour throughout the Province—co-operation, strikes, lock-outs or other labour difficulties, trades unions, labour organizations, the relations between labour and capital, and other subjects of interest to working men, with such information relating to the commercial, industrial, and sanitary condition of working men, and the permanent prosperity of the industries of the Province, as the Bureau may be able to gather.
5. Chapter 14 of the Acts passed in the sixty-third year of Her Late Majesty's reign is repealed.

LABOUR LEGISLATION.

ONTARIO.

BUILDING TRADES PROTECTION ACT.

In an Act passed in 1911 provision was made for the safety of scaffolds, hoists, stays, ladders, flooring, and temporary contrivances used in building. Also for the erection of fireproof buildings of steel, etc. There are also provisions for the safety of passers-by and for the prevention of obstruction. Authority is given to municipalities to appoint inspectors to enforce the Act, and in unorganized territories the Lieutenant-Governor-in-Council may make such appointments. The inspectors may give necessary orders in writing, and until compliance work must be suspended on the portion affected. There is a penalty not exceeding \$50 a day.

LAUNDRIES.

Laundries by an amendment are brought under the Factory Act, and public laundry work must not be done in a room used for a sleeping or living room.

ELECTRICITY IN MINES.

The Mining Act was amended to ensure the safe use of electricity in mines.

APPRENTICES.

An Act was passed consolidating and amending the Apprentices and Minors Act. The old Act is repealed.

STENOGRAPHIC REPORTERS' ACT.

An Act was passed consolidating and amending the Stenographic Reporters' Act. The old Act was repealed.

STATIONARY ENGINEERS.

An Act was passed revising and repealing previous legislation regarding stationary engineers.

PAWNBROKERS.

An Act was passed revising and repealing previous legislation regarding pawnbrokers.

INDUSTRIAL EDUCATION.

An Act amending and extending the Technical Education Act and repealing former legislation was passed.

BRITISH COLUMBIA.

HEALTH REGULATIONS FOR CAMPS.

An Act was passed authorizing the Provincial Board of Health to make regulations respecting the health of lumber camps, mining camps, saw-mills, railway construction camps and other places where labour is employed throughout the

Province. The regulations may deal with the following subjects: (1) respecting any particular industry and the conditions under which it may be carried on for the purpose of preventing nuisances, and the outbreak and spread of disease; (2) for the cleansing, regulating, and inspection of these camps and other places where labour is employed; (3) for the providing by employers of labour of duly qualified medical practitioners, and for the erection of hospitals for the employees; (4) for providing for the construction, arrangement and inspection of houses for the accommodation of the employees. The regulations may either be general in their application or applicable specially to some particular locality or industry. This Act is to be read with and as part of the Health Act, and the penalties applied under that Act are applicable to it. Under this Act regulations for the sanitary control of lumber, mining and other camps, saw-mills and other industries situated in unorganized districts went into effect on June 15, 1911.

AMENDMENTS TO THE HEALTH ACT.

The "Health Act" is amended so as to provide that "Theatre" shall be held to include the buildings, rooms, and places, where are held any play, concert, opera, show, dance, or other public gathering, with the approaches thereto. The Board of Health is authorized to make regulations with regard to the following additional matters:— (y) ventilation and the general sanitary conditions and requirements of all boarding houses, tenement houses and lodging houses, specifying the size of dwelling rooms in these houses, and the number of persons who may dwell therein; (z) compulsory registration of boarding houses, tenement houses, and lodging houses, and the mode of such registration; (aa) the construction, maintaining, inspecting, purifying, cleaning, ventilating and disinfecting of theatres, dance halls, roller-skating rinks, barber shops, cold storage buildings, fish shops, butcher shops, baker shops, bake houses, storehouses, and public bathing houses; (bb) licensing and regulating plumbers; (cc) regulating the plumbing to be installed in buildings, including the materials to be used in connection with all apparatus, and the keeping, cleaning, and repairing of same. An amendment is also made, providing that the rules requiring the vaccination of all persons within the jurisdiction of any Health Officer, shall not apply to any person who makes an affidavit or a statutory declaration that he conscientiously believes that vaccination would be prejudicial to his health (or to the health of his child, as the case may be), or who, for conscientious reasons objects to vaccination.

SHOP REGULATIONS.

An Act was passed to amend the "Shops Regulations Act," chapter 10.

MANITOBA.

EMPLOYMENT AND ADOPTION OF CHILDREN.

An Act was passed amending "The Children's Protection Act," of Manitoba, making it unlawful to employ habitually any child under the age of twelve years, between the hours of 9 o'clock p.m. and 6 o'clock a.m., and also making it unlawful to employ any child under the age of sixteen years in any occupation likely to be injurious to his life, limbs, health, education, or morals. It is further provided that newspaper and magazine publishers in Manitoba receiving and publishing any advertisement dealing with the adoption, boarding-out or care of, any infant under the

age of thirteen months, must procure from the advertiser, in writing, his or her name, address, and occupation, and must forward these particulars to the Superintendent of Neglected Children, immediately after the first publication of the advertisement.

LICENSING OF CHAUFFEURS.

An Act was passed amending "The Motor Vehicle Act," which, among other matters, contains new provisions for the licensing of chauffeurs. Applications for a license to operate motor vehicles as a chauffeur must be made to the municipal commissioner upon blank forms prepared by him, and must be accompanied by a fee of \$5. Applicants must pass an examination as to qualifications, and the municipal commissioner is required to appoint examiners, and to cause such examinations to be held at convenient points throughout the province, as often as may be necessary. License chauffeurs are required to wear, while in charge of a motor vehicle, a badge provided by the municipal commissioner, with the words "Manitoba Licensed Chauffeur" on it, and the number assigned to the wearer. Licenses shall remain in force for one year from April 1. No chauffeur's license shall be issued to any person under eighteen years of age, and no chauffeur or other person shall operate any motor vehicle upon any public highway in the absence of the owner, or without his consent.

PAYMENT FOR EMPLOYEES IN HOSPITALS.

An Act was passed to amend "The Charities Aid Act," which provides that if there is admitted to any hospital as a patient an employee of any person, firm, or company, whose practice is to charge or deduct from the salary or wages of their employees a fee for medical attendance, and if any municipality or the municipal commissioner pays for his or her maintenance there, the amount so paid may be recovered from the employer.

BUILDING PERMITS AND PLUMBING INSPECTORS.

An Act was passed to amend "The Municipal Act," requiring among other things that permits to erect and repair buildings within a municipality must be obtained from the building inspector or other duly authorized officer, and on application for such permit a copy of the plans and specifications of such buildings must be filed, such plans to include provisions for compliance with "The Municipal Act," "The Public Health Act," and the by-laws of the municipality with regard to sanitary and other matters. It also provides for the appointing of one or more plumbing inspectors, who shall have the right to enter on the premises of persons, firms, or corporations, at all reasonable times, and for prescribing a fee for inspection.

"THRESHERS' LIEN ACT."

An Act was passed to amend "The Threshers' Lien Act," requiring owners of threshing machines to make returns to the Department of Agriculture and Immigration on the seventh day of each month during the threshing season, of the quantities and kinds of grain threshed during the preceding calendar month. A penalty not to exceed \$25 is imposed for failure to make such returns.

SHOP REGULATIONS.

An Act was passed to amend "The Shop Regulations' Act."

NEW BRUNSWICK.

WORKMEN'S COMPENSATION.

An act was passed amending the Workmen's Compensation Act, which provides that an injured workman may secure compensation from his employer in a lump sum, when weekly payments have been awarded him by a judge or jury. For this purpose an execution may be issued for the amount due up to the time of the issue of the execution, and also for the amount of weekly payments up to the end of the period for which they have been awarded. In calculating the aggregate amount of weekly payments the future payments are to be discounted at the rate of 4 per cent. per annum.

BOILER INSPECTION.

The Factories Act was amended with respect to boiler inspection and the employment of stationary engineers. Provision was made for the constitution of a board for the examination of stationary engineers. The members of the board must be engineers of not less than 10 years experience in the management of steam engines and plant. A certificate of competency is to be granted to any person who shall satisfy the board upon examination, that he has had sufficient practical experience in the management of a stationary or portable engine or boiler, and possesses sufficient theoretical knowledge to enable him to operate such a plant with safety. No person without a certificate will be allowed to have charge of a steam boiler or engine, under a penalty of not more than \$10 a day. Agricultural engines are excepted and all under 25 horse power.

EARLY CLOSING.

City and town councils were authorized to make by-laws requiring all shops within their city or town to be closed on each or any day of the week except Saturdays, the day preceding a proclaimed public holiday, or on any day during the last three weeks of December, between 6 o'clock in the afternoon and 5 o'clock in the morning of the following day.

ATTENDANCE AT SCHOOL.

The Act providing for the compulsory attendance at school was amended by exempting any child between the ages of 14 and 16 years, provided that the child produces a certificate signed by the secretary of the board of School Trustees, certifying that the child has regularly attended school for a reasonable period, and is reasonably proficient in reading, writing, and arithmetic, and provided that it has passed a satisfactory examination upon these subjects and produced a certificate to that effect, signed by the secretary of the Board of School Trustees.

QUEBEC.

ACCIDENTS IN MINES.

One of the amendments to the Quebec mining law provides that if while a mine or a quarry is being worked an accident takes place resulting in the loss of life or serious injury, the person working the same, or his representative at such mine or quarry, shall forthwith send a written notice to the Minister specifying the nature of the accident, the number of persons killed or injured, and their names if they are known.

TECHNICAL EDUCATION.

The annual grant to the Polytechnic School of Montreal was increased from \$20,000 to \$25,000. A few amendments were made to the Act incorporating the Quebec Technical School. Powers of incorporation were granted to the Shawinigan Technical Institute, the objects of which are the promotion of technical and commercial education at Shawinigan Falls.

SASKATCHEWAN

BUREAU OF LABOUR.

Under date of March 23, 1911, an Act "Respecting the Bureau of Labour" was passed by the Saskatchewan Legislature. The aims and objects of the Bill are defined in the Act, the text of which is as follows:—

1. There shall be attached to the Department of Agriculture a bureau to be styled "The Bureau of Labour."

2. The Lieutenant-Governor in Council may appoint a secretary of the said Bureau, and may also appoint such other officers as may be necessary for the proper conduct of the Bureau.

3. It shall be the object of the Bureau to collect, assort, systematize and publish information and statistics relating to:—

- (a) Employment, wages, and hours of labour throughout the province;
- (b) Strikes and other labour difficulties;
- (c) Co-operation, trades unions, labour organizations;
- (d) The relations between capital and labour, and other subjects of interest to workingmen;
- (e) The commercial, industrial and sanitary conditions surrounding workingmen; and
- (f) Such other matters as relate to the permanent prosperity of the industries of the province.

Immediately that the Bill, which passed the House without division or amendment, became law, an order-in-council was passed appointing Mr. Thomas M. Molloy Secretary of the Bureau.

WORKMEN'S COMPENSATION.

An act was passed providing for compensation to workmen for injuries sustained during their employment. This Act applies only to employment on, in, or about railways, factories, mines, quarries and engineering work, and in or about any building which is either being constructed, repaired, or demolished. An employer is liable for the payment of compensation in any employment to which the Act applies for personal injury by accident to a workman, arising out of, or in the course of employment, if disabled for at least a week. Any contract made after the coming into force of the Act, whereby a workman relinquished any right to compensation, is declared to be void. The amount of compensation recoverable under the Act shall not exceed either the estimated earnings during the 3 years preceding the injury, or the sum of \$1,800. All actions brought under the Act shall be tried by a judge without a jury. An appeal may with the consent of the judge, be taken to the Supreme Court upon any question of law or mixed law and fact, but otherwise there is no appeal from the judgment or order of the trial judge. The Act does not apply to farm labour.

LIST OF LABOUR BUREAUS AND WHEN ORGANIZED.

During the past forty years labour's interests have become so important a factor with representative Governments throughout the world that they deemed it necessary to create Labour Bureaus for the purpose of collecting accurate statistics of the progress of a nation's prosperity arising from commercial, mechanical and agricultural pursuits. The success of these undertakings has proved most satisfactory, as is shown by the following list of Labour Bureaus compiled from official records:—

ONTARIO.—The Bureau of Labour was created by an Act passed by the Ontario Legislature, April 25th, 1900, and amended in 1910. The Department is under the direction of Hon. J. O. Reaume, Minister of Public Works. Secretary of the Labour Bureau, Robert Edgar, Toronto, Ont.

SASKATCHEWAN.—Secretary Bureau of Labour, Thos. M. Molloy, Regina, Sask.

CANADA.—The Department of Labour was established in July, 1900, and practically supersedes the Bureau of Labour of the Department of Agriculture, established in 1890, with Mr. George Johnson as chief clerk. The Department is now a separate portfolio, with Hon. T. W. Crothers as Minister. The Act establishing the Department provides for the monthly issuing of a Labour Gazette, the editor of which is F. A. Acland, Deputy Minister of Labour. The first number of the Gazette was issued in September, 1900.

Great Britain.—The Labour Bureau of the Board of Trade was established March 2nd, 1886. In 1893 the service was greatly enlarged, and given its present name, "Board of Trade Labour Department." A. Wilson Fox, Chief Secretary. It publishes monthly The Labour Gazette; also annual reports.

New Zealand Department of Labour.—The Right Hon. J. A. Millar, Minister of Labour. E. Tregear, Secretary, Wellington, N.Z.

New South Wales.—Department of Labour and Industry. T. B. Clegg, Chief Clerk, Sydney, N.S.W.

Queensland.—Department of Immigration.—Government Labour Bureau and Relief. Chief Clerk, Brisbane, Queensland.

South Australia Labour Bureau.—Chief Clerk, A. C. H. Richardson, Adelaide, South Australia.

West Australia.—Government Statistician, Malcolm A. C. Fraser, Perth, West Australia.

United States Department of Labour.—Established as a Bureau of Labour, January 31st, 1885; made a Department of Labour, June 13th, 1888. Bi-monthly bulletins. Annual reports. Commissioner of Labour, Chas. P. Neill, Washington, D.C.

United States Census Office.—E. Dana Durand, Director of Census, Washington, D.C.

Massachusetts Bureau of Statistics of Labour.—Established June 23rd, 1869. Quarterly bulletins. Annual reports. Chief of the Bureau of Statistics of Labour, Ch. F. Gettemy, Boston, Mass.

Pennsylvania Bureau of Industrial Statistics.—Established April 12th, 1872. Annual reports. Chief of Bureau of Industrial Statistics, John L. Rokey, Harrisburg, Pa.

Connecticut Bureau of Labour Statistics.—Established July 12th, 1873. Abolished July 23rd, 1875. Re-established April 23rd, 1885. Annual reports. Commissioner of Labour, Patrick H. Connolly, Hartford, Conn.

Kentucky Bureau of Agriculture, Labour and Statistics.—First established March 20th, 1876, as a Bureau of Agriculture, Horticulture, and Statistics; the duties of the Bureau were enlarged and the present name adopted April 2nd, 1892. Biennial reports. Commissioner of Agriculture, Labour and Statistics, J. W. Newman, Frankfort, Ky.

Missouri Bureau of Labour, Statistics and Inspection.—Established March 19th, 1879; enlarged March 23rd, 1883. Annual report. Commissioner of Labour, A. W. Biggs, Jefferson City, Mo.

Ohio Bureau of Labour Statistics.—Established May, 1887. Annual reports. Commissioner of Labour, C. H. Wirmel, Columbus, Ohio.

New Jersey Bureau of Statistics of Labour and Industries.—Established March 27th, 1878. Annual reports. Chief of the Bureau of the Statistics of Labour and Industries, W. C. Garrison, Trenton, N.J.

Illinois Bureau of Labour Statistics.—Established May 29th, 1879. Biennial reports. Secretary of the Bureau of Labour Statistics, David Ross, Springfield, Illinois.

Indiana Bureau of Statistics.—Established March 29th, 1879. Biennial reports. Chief of the Bureau of Statistics, J. J. Walsh, Indianapolis, Ind.

New York Bureau of Labour Statistics.—Established May 4th, 1883; created a Department of Labour, 1902. Commissioner of Labour, John Williams, Albany, N.Y. Quarterly bulletins. Annual reports.

California Bureau of Labour Statistics.—Established March 3rd, 1883. Biennial reports. Commissioner of Labour, J. T. McLaughlin, San Francisco, Cal.

Michigan Bureau of Labour and Industrial Statistics.—Established June 6th, 1883. Annual reports. Commissioner of Labour, G. F. Powers, Lansing, Mich.

Wisconsin Bureau of Labour Statistics.—Established April 3rd, 1883. Biennial reports. Commissioner of Labour, J. D. Beck, Madison, Wis.

Iowa Bureau of Labour Statistics.—Established April 3rd, 1884. Biennial reports. Commissioner of Labour, E. W. VanDuyn, Des Moines, Iowa.

Maryland Bureau of Industries Statistics.—Established March 27th, 1884. Annual reports. Chief of the Bureau of Industries Statistics, Chas. J. Fox, Baltimore, Md.

Kansas Bureau of Labour Statistics.—Established March 5th, 1885. Annual reports. Commissioner of Labour, Owen Doyle, Topeka, Kan.

Rhode Island Bureau of Labour Statistics.—Established March 29th, 1887. Annual reports. Commissioner of Labour, Geo. H. Webb, Providence, R.I.

Nebraska Bureau of Labour and Industrial Statistics.—Established March 31st, 1887. Biennial reports. The Governor, *ex-officio* Commissioner. Deputy Commissioner of Labour and Industrial Statistics, Louis V. Guye, Lincoln, Neb.

North Carolina Bureau of Labour Statistics.—Established February 28th, 1887. Annual reports. Commissioner of Labour, M. L. Shipman, Raleigh, N.C.

Maine Bureau of Labour Statistics.—Established March 7th, 1887. Annual reports. Commissioner of Labour, J. F. Connelly, Augusta, Me.

Minnesota Bureau of Labour.—Established as a Bureau of Labour Statistics, March 8th, 1887; enlarged and changed to the Bureau of Labour, April, 1893. Biennial reports. Commissioner of Labour, W. F. Houk, St. Paul, Minn.

Oklahoma Department of Labour.—Established September, 1907. Commissioner of Labour, Charles L. Daugherty, Guthrie, Okla.

Colorado Bureau of Labour Statistics.—Established March 24th, 1887. Biennial reports. Commissioner of Labour, E. V. Brake, Denver, Col.

West Virginia Bureau of Labour.—Established February 22nd, 1889. Annual reports. Commissioner of Labour, I. V. Barton, Wheeling, W. Va.

North Dakota Department of Agriculture and Labour.—Established October 1st, 1890. Biennial reports. Commissioner of Labour, W. C. Gilbreath, Bismark, N.D.

Montana Bureau of Agriculture, Labour and Industry.—Established February 17th, 1893. Annual reports. Commissioner of Labour, J. H. Hall, Helena, Mont.

New Hampshire Bureau of Labour.—Established March 30th, 1893. Biennial report. Commissioner of Labour, J. E. D. Davie, Concord, N.H.

Washington Bureau of Labour.—Established June 11th, 1897. Annual reports. Commissioner of Labour, C. F. Hubbard, Olympia, Wash.

Idaho Bureau of Labour and Mining Statistics.—Established March 11th, 1895. Annual reports. Commissioner of Labour, Jos. P. Fallon, Boise City, Idaho.

Virginia Bureau of Labour and Industrial Statistics.—Established March 3rd, 1898. Annual report. Commissioner of Labour, James B. Doherty, Richmond, Va.

Louisiana Bureau of Statistics of Labour.—Established July 9th, 1900. Biennial reports. Commissioner of Labour, Jas. Byrnes, New Orleans, La.

Oregon Bureau of Labour Statistics and Inspection of Factories and Workshops.—Established June 3rd, 1903. Biennial reports. Commissioner of Labour and Inspector of Factories and Workshops, O. P. Hoff, Salem, Ore.

Tennessee Bureau of Labour, Mines and Mineral Department.—Established 1891. Commissioner of Labour, R. A. Shiflett, Nashville, Tenn.

South Carolina Department of Agriculture, Commerce, and Industry.—Re-organized 1909. Commissioner, E. J. Watson, Columbia, S.C.

Argentine Republic.—Francoise Latzina, Director General de la Statistique de la Republique Argentina (Ministere de l'Interieur), Buenos Ayres.

Austria-Hungary.—Commission Central of Statistics (Minister of Public Instruction). Dr. Karl Theodor von Inama Sternegg, President, Vienna. Department of Municipal Statistics, Dr. Sedlatzek, Chief, Vienna.

Bavaria.—Royal Bureau of Statistics (Department of Interior). Karl Rasp, Director, Munich.

Belgium.—Royal Bureau of General Statistics (Minister of the Department of the Interior and Public Instruction). Edmund Nicoali, Chief, Brussels.

Brazil.—Dr. R. Pompeia, Director de Bureau de Statistique des Etats Unis du Bresil (Ministere de l'Interieur), Rio Janeiro.

Bulgaria.—Bureau of Statistics of Bulgaria (Minister of Public Instruction). F. Ivanchoff, Director, Sophia.

Chili.—Don Francisco S. Asta Burnaga, Chef du Bureau Central de Statistique de Chili, Santiago.

Denmark.—Royal Bureau of Statistics (Minister of Finance). Marius de Gad, Director, Copenhagen.

France.—Office du Travail (Ministere du Commerce et de l'Industrie). C. Moron, Directeur, Paris.

Victor Furquan, Chef du Bureau de la Statistique General de France (Ministere du Commerce et de l'Industrie).—Office du Travail, Paris.

Germany.—Imperial Office of Statistics (Department of Interior). Dr. F. W. Hans Von Schell, Director, Berlin.

Herzegovina.—Bureau of Statistics of Bosnia and Herzegovina. Dr. Ferdinall Schmidt, Director, Sarajevo.

Holland.—Herr Methour, Director of Netherlands Statistical Central Office, La Haye, Netherlands.

Italy.—Directeur General de la Statistique du Royaume, G. Montemartini, Director dell' Offices del Lavoro (Ministere de l'Agriculture, de l'Industrie, et du Commerce), Rome.

Japan.—N. Hanausa, Chef du Bureau General de la Statistique (Cabinet Imperial), Tokio.

Mexico.—Antonio Penafiel, Directeur General de la Statistique de la Republique (Mexicaine du Fomento), Mexico.

Paraguay.—I. Jasquet, Director General de la Statistique du Paraguay, Assumption.

Portugal.—Ernesto Madeira Pinto, Director General of Statistics of Commerce (Minister of Public Works, Commerce and Industries), Lisbon.

Prussia.—Royal Bureau of Statistics (Minister of the Department of the Interior). Karl Julius Emil Blenck, Director, Berlin.

Office of the Statistics of the City of Berlin. Dr. Richard Bockh, Director, Berlin.

Roumania.—C. E. Cupenski, Directeur de la Statistique General du Royaume (Minister de l'Agriculture, de l'Industrie, du Commerce, et des Domaines), Bucharest.

Russia.—Bureau, Directeur du Comite Central de Statistique (Ministere de l'Interieur), St. Petersburg.

B. Grigoreff, Chef du Bureau de la Statistique Municipale, Moscow.

Saxony.—Bureau of Statistics of the Minister of State. Dr. Victor Bohmert, Director, Dresden.

Spain.—Ing. Francisco de Paulo de Arrillaga, Director General of the Geographic Institute and Bureau of Statistics of Spain, Madrid.

Styria.—Bureau of Statistics of Styria. Dr. Ernest Michler, Director, Gratz.

Sweden.—Dr. Elis Sidenbalddh, Director en Chef du Bureau Central de Statistique de Royaume (Ministere de l'Interieur), Stockholm.

Norway.—Anders Nicolaikiser, Directeur du Bureau Central de Statistique du Royaume (Ministere de l'Interieur), Christiana.

Switzerland.—Dr. Louis Guillaume, Directeur du Bureau Federal de Statistique (Ministere de l'Interieur), Berne.

Stephen Bauer, Office International du Travail, Basle, Switzerland.

Uruguay.—Honore Roustau, Directeur du Bureau de la Statistique General, Montevideo.

LIST OF NATIONAL AND INTERNATIONAL LABOUR ORGANIZATIONS.

WITH NAMES AND ADDRESSES OF GENERAL SECRETARIES, HAVING SUBORDINATE ORGANIZATIONS IN THE PROVINCE OF ONTARIO.

Trades and Labour Congress of Canada, P. M. Draper, Box 1017, Ottawa, Ont.

American Federation of Labour, Frank Morrison, 801-9 G Street, N.W., Washington, D.C.

Actors'. National Protective Union, Lew Morton, 8 Union Square, New York, N.Y.

Allied Metal Mechanics' International Association, John E. Devlin, 421 Valentine Building, Toledo, Ohio.

Asbestos Workers of America, T. J. McNamara, 1725 Elliott Avenue, St. Louis, Mo.

Bakers' and Confectioners' International Journeymen, Otto E. Fischer, 212 Bush Temple of Music, Chicago, Ill.

Barbers' International Union, Journeymen, Jacob Fischer, Box 517, Indianapolis, Ind.

Bill Posters and Billers of America, W. McCarthy, 1493 Broadway, New York.

Brushmakers' International Union, R. M. Parks, 717 Washington Boulevard, Chicago, Ill.

Blacksmith, International Brotherhood of, W. F. Kramer, Rooms 570-585 Monon Building, Chicago, Ill.

Blast Furnace Workers and Smelters of America, International Association, William J. Clarke, 128 Sandusky Street, Buffalo, N.Y.

Boilermakers and Iron Shipbuilders of America, W. J. Gilthorpe, Room 7, Law Building, Kansas City, Kansas.

Bookbinders, International Brotherhood of, J. W. Dougherty, Room 210, 132 Nassau Street, New York, N.Y.

Boot and Shoe Workers' Union, C. L. Baine, 246 Summer Street, Boston, Mass.

Brewery Workers, International Union of, Louis Kimper, Station E., Cincinnati, O.

Brick, Tile and Terra Cotta Workers, International Alliance, Wm. Van Bodengraven, 56 Fifth Av., Chicago, Ill.

Bridge and Structural Ironworkers, International Association of, J. J. McNamara, 422 American Central Life Building, Cleveland, Ohio.

Broommakers' International Union, C. T. Dolan, 814 West Harrison Street, Chicago, Ill.

Bricklayers' and Masons' International Union, William Dobson, Oddfellows Building, Indianapolis, Ind.

Builders' Labourers' International Union, S. P. Johnson, 2326 East Eighth St., Los Angeles, Cal.

Carpet Workers of America, F. A. McCaskee, Kensington Ave., Philadelphia, Pa.

Carpenters and Joiners, United Brotherhood, Frank Duffy, P.O. Box 187, Indianapolis, Ind.

Carpenters and Joiners, Amalgamated Society, Thomas Atkinson, Room 76, Bible House, New York, N.Y.

Cement Workers, American Brotherhood of, H. T. Ullner, Mechanics Bank Building, San Francisco, Cal.

Carriage and Wagon Workers, International, W. P. Mavell, 403 South Division, Buffalo, N.Y.

Carvers' (Wood) Association of North America, International, Thos. J. Lodge, 10 Carlisle St., Roxbury, Mass.

Carworkers, International Association of, G. W. Gibson, Rooms 1209-10 Star Building, 356 Dearborn Street, Chicago, Ill.

Chainmakers, National Union of U.S. of America, C. R. Stanton, Box 13 Maxwell, Ind.

Compressed Air Workers, International Union, Wm. McQuade, 414 E. 120 St. New York.

Curtain (Lace), Amalgamated Operators of America, G. J. Raiser, 3021 N. Fifth St., Philadelphia, Pa.

Cutting Die and Cutter Makers' International Union, Harry Reiser, 616 Sixth Ave., New York.

Cigarmakers' International Union of America, George W. Perkins, Room 820 Monon Block, 320 Dearborn Street, Chicago, Ill.

Clerks' (Retail) International Protective Association, H. J. Conway, Box 1581, Denver, Col.

Coopers' International Union of North America, W. R. Deal, Board of Trade Building, Kansas City, Kansas.

Commercial Telegraphers' Union of America, The, Wesley Russell, 930 Monon Building, Chicago, Ill.

Cloth Hat and Cap Makers of North America, Max Zuckerman, 63 E. Fourth Street, New York, N.Y.

Conductors, Order of Railroad, W. J. Maxwell, Cedar Rapids, Iowa.

Electrical Workers, International Brotherhood of, Peter W. Collins, Pierik Buildings, Springfield, Ill.

Engineers, International Union of Steam, R. A. McKee, 606 Main St., Peoria, Ill.

Engineers, Locomotive Brotherhood of, W. B. Printer, 306 Society for Savings, Cleveland, Ohio.

Engineers (Stationary), National Association of, F. W. Raven, 323 Dearborn St., Chicago, Ill.

Engineers and Machinists, Amalgamated Society of, Wm. Delahay, 74 Lafayette St., N.Y.

Elevator Constructors, International Union, W. Young, 952 North Nineteenth St., Philadelphia, Pa.

Firemen (Stationary), Int. Bro. of, C. L. Shamp, Rooms 2-4, 2502 N 18th Street, Omaha, Neb.

Freight Handlers' and Warehousemen's Union of America, J. J. Flynn, 210 S. Halstead Street, Chicago, Ill.

Fur Workers of the U. S. and Can., Int. Association, A. V. McCormack, P.O. Box 124, Toronto, Canada.

Firemen and Engineers, Locomotive, Brotherhood of, A. H. Hawley, Peoria, Ill.

Flour and Cereal Mill Employees' International Union, A. E. Kellington, 316 Corn Exchange, Minneapolis, Minn.

Fitters' (Steam and Hot Water) International Association, W. H. Davies, Merriek Building, Chicago, Ill.

Foundry Employees, International Brotherhood of, G. Bechtold, 200 South Broadway, St. Louis, Mo.

Glove Workers' International Union of America, Agnes Nestor, Bush Temple of Music, Chicago, Ill.

Granite Cutters' International Association of America, Jas. Duncan, Hancock Building, Quincy, Mass.

Gold Beaters' National Protective Union of America, Thos. Delaney, 88 Barrow Street, New York.

Grinders' and Finishers' National Union (Pocket Knife), F. A. Didsbury, 508 Brook Street, Bridgeport, Conn.

Grinders' National Union (Table Knife), J. F. Gleason, 76 Chestnut St., Bristol, Conn.

Garment Workers of America, B. A. Larger, Rooms 116-117 Bible House, New York, N.Y.

Garment Workers' Union, International Ladies', John Alex. Dyche, 25-27 Third Avenue, New York, N.Y.

Glass Workers (Window), Amalgamated, of America, Chas. Bryant, Electric Building, Cleveland, Ohio.

Glass Bottle Blowers' Association of United States and Canada, William Launer, Room 930, Witherspoon Building, Juniper and Walnut Sts., Philadelphia, Pa.

Glass Snappers' National Protective Association of America (Window), L. L. Jacklini, Kane, Pa.

Glass Workers' Amalgamated Association, International, William Figolah, 418 N. Clark St., Chicago, Ill.

Glass Workers' (Flint) International, W. P. Clarke, 929 Ohio Building, Toledo, Ohio.

Hatters of North America (United), Martin Lawlor, 11 Waverley Place, Room 15, New York, N.Y.

Horseshoers, International Journeymen, Roady Kenehan, 1548 Wazee Street, Denver, Col.

Hod Carriers' and Building Labourers' International Union of America, A. Persian, Box 597, Albany, N.Y.

Hotel and Restaurant Employees' and Bartenders' International Alliance, Jere L. Sullivan, Commercial Tribune Building, Cincinnati, Ohio.

Iron, Steel, and Tin Workers' Amalgamated Association, J. Williams, 50 House Building, Pittsburg, Pa.

Jewelry Workers' International Union, Geo. Bessinger, 50 Sterling St., Newark, N.J.

Knights of Labour, J. Frank O'Meara, Bliss Building, Washington, D.C.

Lathers' International Union of Wood, Wire and Metal, R. V. Brandt, 401 Superior Building, Cleveland, Ohio.

Laundry Workers' International Union, Ch. F. Bailey, Box 11, Sta. 1, Troy, N.Y.

Lake District International Seamen's Union, 121 N. Desplaines Street, Chicago, Ill.

Leather Workers on Horse Goods, United Brotherhood, J. J. Pfeiffer, 209 Postal Building, Kansas City, Mo.

Leather Workers' Amalgamated International Union of America, John Roach, Box 414, Newark, N.J.

Lithographers' International P. & B. Association of U. S. and Canada, John Treanor, 419 Pacific St., Brooklyn, N.Y.

Lobster Fishermen's International Protective Association, J. B. Webster, Vinal Haven, Me.

Longshoremen, International Association, J. J. Joyce, 1003 Mutual Life Building, Buffalo, N.Y.

Machine Printers and Color Mixers of U.S., C. McCrory, 429 Forty-second Street, Brooklyn, N.Y.

Machinists, International Association of, George Preston, 402 McGill Building, Washington, D.C.

Maintenance of Way Employees' International Brotherhood, S. J. Pegg, Vanol Building, St. Louis, Mo.

Moulders' International Union of North America, V. Kleiber, Box 699, Cincinnati, Ohio.

Marble Workers' International Association, S. C. Hogan, 715 Eagle Avenue, New York.

Meat Cutters' and Butchers' Workmen, International Union, Homer D. Call, Lock Box 212, Syracuse, N.Y.

Metal Polishers', Buffers', Platers' and Brassworkers' Union, C. R. Atherton, Neave Building, Cincinnati, Ohio.

Metal Workers of America (United), International Union, C. O. Sherman, 148 West Madison St., Chicago, Ill.

Mine Workers of America (United), Edwin Perry, 1106 State Life Building, Indianapolis, Ind.

Musicians, American Federation of, Owen Miller, 3535 Pine Street, Broadway and Market Streets, St. Louis, Mo.

Metal Workers, International Alliance of Amalgamated Sheet, J. E. Bray, 325 Nelson Building, Kansas City, Mo.

Pavers and Rammermen, International Union of, Ed. J. Hannah, 249 E 57th St., New York.

Paving Cutters' Union of U. S. and Canada, J. Sheret, Lock Box 116, Albion, N.Y.

Post Office Clerks, National Federation of, G. F. Pfeiffer, 377 Albion Street, Milwaukee, Wis.

Potters, National Brotherhood of, E. Menge, Box 181, East Liverpool, Ohio.

Powder and High Explosive Workers of America, Ch. L. Thomas, Olyphant, Pa.

Plasterer's International Association (Operative), T. A. Scully, Middletown, Ohio.

Painters', Decorators' and Paperhangers' Brotherhood of America, J. C. Skemp, Box 99, Lafayette, Indiana.

Paper Makers, United Brotherhood of America, J. T. Carey, 22 Smith Building, Watertown, N.Y.

Patternmakers' League of North America, Jas. Wilson, 403 Neave Building, Cincinnati, O.

Piano and Organ Workers' International Union of America, Chas. Dodd, 1037 Greenwood Terrace, Chicago, Ill.

Plate Printers' (Steel and Copper), International Union of America, T. L. Mahan, 319 S. Street, N. E., Washington, D.C.

Plumbers', Gasfitters', Steamfitters' and Steamfitters' Helpers, United Association of United States and Canada, T. E. Burke, 401-6 Bush Temple of Music, Chicago, Ill.

Printing Pressmen, International Union, Ch. B. Crowley, 501 Second National Bank Building, Cincinnati, Ohio.

Photo Engravers' Union of N. A., Louis A. Schwarz, 228 Apsley St., Philadelphia, Pa.

Quarryworkers' International Union of North America, Fred. W. Sutor, Scampini Building, Barre, Vermont.

Railway Carmen of America, Brotherhood of, E. W. Weeks, 507 Hall Buildings, Kansas City, Mo.

Railway Clerks, Order of, R. E. Fisher, 310 Kansas City Life Building, Kansas City, Mo.

Railway Employees (Street and Electric), Amalgamated Association, W. D. Mahon, 45 Hodges Block, Detroit, Mich.

Railroad Telegraphers, Order of, L. W. Quick, Star Building, St. Louis, Mo.

Railroad Trainmen, Brotherhood of, A. E. King, Cleveland, Ohio.

Railroad Freight and Baggage-men, Brotherhood of America, M. Cronin, Woodworth Building, Lancaster, Pa.

Roofers (Composition), Damp and Fireproof Workers of U. S. and Canada, International Brotherhood, Dan. J. Ganley, 14 N. Oxford St., Brooklyn, N.Y.

Rubber Workers' Amalgamated Union of America, Clarence E. Akerstrom, 25 Grant Street, Cambridge, Mass.

Sheet Metal Workers' Amalgamated International Alliance, John E. Bray, 313 Nelson Building, Kansas City, Mo.

Sawsmith's National Union, F. E. Kingsley, 1145 Beville Avenue, Indianapolis, Ind.

Seamen's International Union of America, W. H. Frazier, Lewis St., Boston, Mass.

Shingle Workers' International Union of America, J. E. Campbell, 405 American National Bank Building, Everett, Wash.

Shipwrights', Joiners' and Caulkers' International Union of America, Thos. Durett, 108 Marshal St., Elizabeth, N.J.

Slate and Tile Roofers' International Union of America, J. M. Gavlock, 3643 W. 47th St., Cleveland, Ohio.

Steam, Hot Water and Power Pipe Fitters and Helpers, International Association of, W. H. Davies, Room 205, Merrick Building, Chicago, Ill.

Steam Shovel and Dredgemen, International Brotherhood of, T. J. Dolan, 134 Munroe St., Chicago, Ill.

Stonecutters' (Journey-men) Association of North America, Jas. F. McHugh, Drawer 2,348, Washington, D.C.

Slate Workers, International Union of, T. H. Palmer, Pen Argyle, Pa.

Spinners' International Union, S. Ross, Box 337, New Bedford, Mass.

Steel Plate Transferers' Association of America, Dennis H. Shirman, 1301 Madison N.W., Washington, D.C.

Stage Employees' (Theatrical), International Alliance, Lee M. Hart, State Hotel, State and Harrison Street, Chicago, Ill.

Stereotypers' and Electrotypers' International Union of North America, Geo. W. Williams, 665 Massachusetts Avenue, Boston, Mass.

Switchmen's Union of North America, M. R. Welch, 326 Brisbane Building, Buffalo, N.Y.

Stove Mounters' International Union, J. H. Kaefer, 166 Concord Avenue, Detroit, Mich.

Tailors' (Journey-men) Union of America, E. J. Brais, Box 597, Bloomington, Ill.

Teamsters, International Brotherhood of, Thos. L. Hughes, 222 E. Michigan St., Indianapolis, Ind.

Textile Workers, United, of America, John Golden, P.O. Box 742, Fall River, Mass.

Tile Layers' and Helpers' (Ceramic, Mosaic and Encaustic), International

Union, James P. Reynolds, Harmony, Pa.

Tin Plate Workers' International Protective Association of America, C. E. Lawyer, Reilly Block, Wheeling, W. Va.

Tip Printers International Brotherhood, T. J. Carolan, 252 Market St., Newark, N.J.

Tobacco Workers, International Union of, E. Lewis Evans, Room 56, American National Bank Building, 3rd and Main Streets, Louisville, Kentucky.

Typographical Union, International, J. W. Hays, Rooms 640-50, Newton-Claypool Building, Indianapolis, Ind.

Travellers' Goods and Leather Novelty Workers' International Union of America, Murt. Malone, 203 Jefferson Ave., Oshkosh, Wis.

Upholsterers' International Union of America, J. H. Hatch, 159 East Fifty-seventh St., New York.

Weavers' Amalgamated Association Elastic Goring, Alf. Haughton, 50 Cherry St., Brockton, Mass.

Weavers' Protective Association, America, Wire, A. A. Brooks, 229 Chesnut, Holyoke, Mass.

Woodmen and Sawmill Workers' International Brotherhood, A. Livingston, Lothrop, Mont.

Woodworkers' Amalgamated International Union of America, Jno. G. Meiler, 35-38 N. Albany Av., Chicagó, Ill.

RECENT LEGAL DECISIONS AFFECTING LABOUR IN ONTARIO.

Labour Gazette, February, 1911.

\$1,000 For Loss of Arm.

In the case of Lloyd Brown versus C. P. R., tried before Judge Teetzel and a jury at Brantford, the jury awarded \$1,000 to plaintiff, who lost an arm on the railway track three years ago. The judge said: "Upon the answers of the jury to the questions submitted, I direct judgment to be entered in favour of the plaintiff for \$1,000 and costs, including cost of last trial, and I grant to plaintiff leave to appeal against my ruling as to costs of last trial.

Conductor Fined for Assault.

"Conductors have a certain amount of provocation and have to put up with some unpleasantness; but it's part of their job. They are not paid to strike passengers," said Magistrate Kingsford in the Police Court at Toronto, when Conductor Fred. T. Macklem was fined \$1 and costs for striking Roy Belleyea on an Avenue Road car. Belleyea boarded the car with his transfer ready to give the conductor, who was stationed at the rear door *a la* P. A. Y. E., but was carried to the front of the car by the inrush of passengers. The conductor came up to him when he was sitting with his brother, took the transfer and proceeded to tell him in a very loud voice that he should have paid at the rear door. Belleyea listened for a while and then told the conductor to go on with his collection of fares and mind his own business, whereupon the conductor struck him in the face.

*Labour Gazette, March, 1911.***Unsuccessful Claim for Damages.**

Plaintiff, a business man in the employ of defendant railway company, was engaged in repairing a broken connection in the trolley line. He was standing on defendant's tower repair wagon when a guy wire broke, causing him to be thrown to the ground. He brought action to recover damages for injuries sustained, alleging negligence on the part of defendants. Each guy wire was temporarily attached to the woodstrain by being passed through an opening and then twisted around itself, and, if properly twisted, the wire would not pull out. The accident was caused by a defect in the making of one of these ties by McE., the plaintiff's fellow workman, as the wire which pulled out could not have been securely twisted over itself. The jury found the defendant's foreman, one S., was negligent in not observing that the ties of the guy wire with the wood-strain were insecurely made, and awarded plaintiff \$975 damages. Upon appeal to the Divisional Court, it was held that the plaintiff had suffered, not from any negligence of the foreman, who did not see, and, if he had seen, could not have noticed, the defect in the tie, but from the negligence of plaintiff's fellow workman Mr. E. Appeal allowed and action dismissed without costs.

(Davidson v. Toronto Ry. Co., 17 W. R., 844.)

*Labour Gazette, April, 1911.***Fatal Fall from Runaway.**

In an action by the plaintiff against the defendants for damages for the death of the plaintiff's son, through the alleged negligence of the defendants, judgment was given by Mr. Justice McGee, the trial judge, in favour of the plaintiff upon the findings of the jury. This judgment was affirmed by the Divisional Court, and upon appeal was re-affirmed by a majority of the Court of Appeal, Mr. Justice Meredith and Mr. Justice Riddell being the dissenting judges in that Court. The plaintiff's son, while engaged in the employ of defendants in wheeling a barrow containing mixed concrete from a platform where it was made up, along a narrow plank walk or way, spoken of in the evidence as the "north runway," in the direction of the abutment of a bridge over a highway, in course of construction by defendants, fell in some way to the ground 20 feet below and was killed. Chief Justice Moss for the majority of the Court said: "The sole question is as to how the accident happened. It is well settled that where there is a conflict or doubt as to the proper inference to be drawn from the facts in proof, or if the evidence is such that the jury might reasonably come to a conclusion in favour of the plaintiff, or might reasonably draw a contrary inference, the case is for the jury to decide. I agree with the Divisional Court that facts were proved from which the jury might reasonably conclude that the cause of death was the fall of deceased from the north runway. And I have no difficulty in also agreeing that there was in the testimony quite sufficient to justify the jury in finding that the north runway, constructed where and in the manner shown by the evidence, was dangerous to persons using it for the purposes to which it was put."

(McKean v. C. P. R. Co., Ont., W. N., 812.)

Damages for Loss of Arm.

The Divisional Court has dismissed the appeal of the C. P. R. from the decision of Mr. Justice Teetzel awarding Lloyd Brown of Brantford \$1,000 for the

loss of his right arm. Brown was stealing a ride from Toronto riding on an oil tank car. At Galt the conductor ordered him off, and he fell, his arm going under the wheels. The Divisional Court held that he was unlawfully on the train, but this did not justify the conductor ordering the man off when his getting off the train might have been accompanied with danger by reason of the rapid rate at which the train was going. The case has been tried twice, Chancellor Boyd awarding the man \$2,000 damages at the first trial. The Court of Appeal directed a second trial.

Labourers Lose Appeal.

Mr. Justice Riddell has dismissed the appeal of Roki Gaetano, an assignee of the claims of 16 foreign labourers on the National Transcontinental Railway, who were in the employ of the Nepigon Construction Co. The defendants took \$3,279 from the wages of the men for railway fare and other necessities. The men disputed the claims, but Judge O'Leary, of Port Arthur, dismissed their claim and he was sustained by Mr. Justice Riddell.

Labour Gazette, May, 1911.

Damages Recoverable by Teamster.

In an action tried by Chief Justice Falconbridge to recover \$1,245 for teaming done by the plaintiff for the defendants, the plaintiff claimed \$5 per day, or 50 cents an hour for each man and team, while the defendants alleged that the price to be paid was \$4 per day, or 40 cents an hour, and paid \$1,000 into court. The Chief Justice said that the plaintiff had failed to establish a contract by telephone to pay \$5 a day, or 50 cents an hour. The plaintiff swore that he said twice that the charge would be at that rate, and he was corroborated as to that, but he did not swear that this was assented to, and the person who was speaking to him, on behalf of the defendants, denied that he assented. The other teamsters hired by the defendants were getting only \$4 a day. And, as to a *quantum meruit*, the plaintiff failed to satisfy the onus of proof that the rate ought to be \$5 a day. The money paid into Court was sufficient to satisfy the plaintiff's claim. Judgment for that amount, without costs to either party, and order for payment out of Court to the plaintiff of the \$1,000.

(*Montgomery v. Cockshutt Plough Co.*, 2 O. W. N. 924.)

Inconsistent Findings of Jury.

In an action tried by Mr. Justice Latchford and a jury, the plaintiffs claimed for damages for the death of Frederick Miller, the father of the plaintiffs, while working in the defendant's sawmill, by reason of the negligence of the defendant, as alleged. The jury found, in answer to questions: (1) That the death of Miller was the result of an accident which occurred in the defendant's factory on July 12, 1910; (2) that the accident was caused by the piece of wood exhibited, while in the hands of Miller, coming into contact with the saw exhibited and flying back and striking him on the abdomen and causing death; (3) that the saw that Miller was using was a dangerous part of the machinery of the defendant's factory; (4) that the saw was not, as far as practicable, securely guarded; (5) that the saw would not have been securely guarded, so as to prevent the accident, if Miller had used the guard or divider with which the defendant had furnished him; (6) that Miller could, by the exercise of reasonable care and diligence, have avoided the accident; (7) that his want of reasonable care and diligence consisted in his not

using the appliance provided as a guard; (8) that the plaintiffs were entitled to \$1,500 damages, less \$150 already received. The trial judge said that it seemed impossible to reconcile the fifth finding with the sixth and seventh. In attempting to explain the inconsistent answers, the foreman, pointing to the divider, said that the jury did not consider it a guard which would prevent a piece of wood from falling on the saw, and that Miller's negligence was "a matter of a little bit of carelessness in dropping this wood." In other words, the appliance, if in place, would not have been effective in preventing what actually occurred, and Miller's negligence consisted in letting fall the board that he was trimming and not, as stated in the seventh finding, in not using the appliance provided as a guard. The result is a miscarriage, or at least a postponement, of justice. There can be no possible doubt that it is an abuse of language to call the divider a guard. It was not used and could not be used when the saw was cross-cutting, but only when the saw was ripping or edging, and then its function was to act as a wedge to widen the saw-kerf, and thus prevent binding, especially by hard or knotty woods. It is properly a splitter or divider. Its crescent-shaped end, rising near and slightly over the back of the saw, does indeed afford some protection; but the whole front and much of the upper edge of the saw—and it was the contact of this upper edge with the board in Miller's hand that caused his death—was absolutely unguarded. It was painful to hear the defendant and several of his employees describe, upon oath, the splitter as a guard; and, while the action should be dismissed, the dismissal should be without costs.

(*Miller v. Kaufman*, 2 O. W. N. 925.)

Improvident Release.

Upon an appeal to a Divisional Court by the defendants from the judgment of Teetzel, J., it appeared that the plaintiffs, Alice Gissing and her husband, Albert A. Gissing, brought action against the T. Eaton Co. to recover \$5,000 damages for injuries alleged to have been inflicted on the plaintiff, Alice Gissing, by rolls of oilcloth that were standing in the defendant's store toppling over and falling on her. At the trial judgment was given Alice Gissing for \$750 and costs. Defendants set up a release for \$50 signed by the plaintiff, in answer to the claim, and the trial Judge tried that question first, before submitting the main issue to the jury. He allowed the plaintiff at the trial to amend her reply, setting up that the release or alleged statement was improvident and inadequate, and not such as should be allowed to stand in answer to her claim. The judgment of the majority of the Court was delivered by Chancellor Boyd who said that there had been a double trial, first on the question of the release, by the trial judge and then by the jury on the question of injuries to the plaintiff and damages. The trial judge decided that the alleged settlement did not furnish an answer to the plaintiff's claim. The verdict for \$750 shows the estimate which the twelve men composing the jury placed upon the plaintiff's injuries. It is true that in the beginning, Mrs. Gissing was willing to release the Eaton Company from all liability on payment to her of \$200, and if that demand had been acceded to, it might have been a fair settlement and this case would never have been here. But \$50 was grossly inadequate, and was not commensurate with the injuries by plaintiff, who suffered a serious injury and is entitled to substantial damages. It cannot be said that the parties were dealing on equal terms. The woman was in bed; her leg was benumbed; she had that day suffered from a fainting spell caused by the pain from her injury; she was worried about the health of her husband, who was suffering from heart failure, and who

was in a state of trepidation. Black, the claims agent, of the defendants, who negotiated with her, was an astute, alert man, who thoroughly understood the business in hand and its consequences. The trial judge credits what the woman says of the matter. He also says in his judgment: "Black had alleged that they were prepared to prove by witnesses that she had not got hurt in the way she claimed at all, which, together with the fact that she had lost or forgotten the address of the only witness whom she had in mind to prove her case, would be circumstances which, in her then condition, would probably unduly influence her in accepting any proposed compromise." Looking at all the circumstances I am not able to say that the judgment should be disturbed. The appeal should be dismissed with costs. Mr. Justice Middleton dissented.

(*Gissing v. Eaton Co.*, 2 O. W. N. 1021.)

Appeal in Accident Case Dismissed.

The Court of Appeal has dismissed the appeal of the Grand Trunk Railway Company from the decision of Mr. Justice Middleton at the trial at which the railway was mulcted for \$2,000 for the death of James A. Griffith, a labourer at the Hamilton Steel and Iron Company's Works. Mr. Justice Meredith thought that there should be a new trial. Griffith, who lived at Rockwood Park, was killed at the Kenilworth crossing on December 29, 1909, while he was going home from work at 6 o'clock. Just at the point of the accident the high fence of the Hamilton Jockey Club hid the view of the track.

Fined for Smuggling Aliens.

For assisting aliens to evade the Canadian immigration officers, Daniel Surtig, a Michigan Central section foreman, has been fined \$50 and costs by the police magistrate at Windsor. Surtig had a system devised for bringing the aliens over the line, using his job with the railway company as a means of procuring timetables which were given the new-comers with a set of instructions to pose as rail-rovers. Immigration Officer Brien detected the scheme and made the arrests, including that of Surtig.

Labour Gazette, June, 1911.

Damages Under Workmen's Act.

An action under the Workmen's Compensation for Injuries Act, for damages for injury sustained by plaintiff when in defendants' employment. Plaintiff, a labourer, was employed by defendant company, who were erecting a concrete dam on the Otonabee River, and was working at a mixer machine for making concrete. On Sunday, November 13, 1909, defendants' foreman ordered plaintiff to assist in constructing a cribwork of square timber, and whilst so engaged he slipped and fell from the wet and icy timber, sustaining the injury sued for. In his judgment on May 22 last, Chief Justice Mulock, who tried the action, said: I think the case comes within the Act. There is no evidence to show that the accident was caused by want of care on the part of plaintiff. The injury he sustained is of a serious character, and I award him \$1,500 damages and \$10.50 arrears of wages owing to him, with costs of the action.

(*Quinto v. Bishop.*)

Damages to Miner.

Plaintiff, a miner, engaged in running a drill at the bottom of a shaft or winze, was seriously injured by the falling of a large rock from the third level upon his left hand, smashing and breaking the bones in the hand and rendering it useless. Plaintiff sued for \$3,000 damages. In his judgment on May 26, last, Chief Justice Falconbridge, who tried the action, said: The plaintiff proved and the jury found failure by defendants to comply with subsections 17 and 31 of section 164 of the Mining Act of Ontario. Judgment for plaintiff for \$2,500 and costs. Thirty days' stay.

(Kalee Sien *v.* Temiskaming Mining Co.)

Damages for Death of Husband.

In an action brought against the Grand Trunk Railway Company at the Spring Assizes at Brockville on account of the death of an employee, by his widow, damages amounting to \$1,500 were awarded, out of which \$600 were awarded to the plaintiff, and \$900 to her child. The husband of the plaintiff had been employed as a sectionman at Lyn Station and was struck by a train while at work in the above station yard on account of not being able to see approaching train owing to a dense fog. It had been contended by the Company that no case had been made out as the rules of the Company provided that the trains are allowed to run on opposite tracks and during fogs. When men are working on the track, it is left to their own prudence and safety to protect themselves.

Damages to Widow.

An action for \$5,000 damages was entered by the widow of an employee of the firm of J. Briggs & Son, of Brockville, for the death of her husband who was killed while at work in the shop of the above firm. It was claimed by the plaintiff that the machinery was in an unsafe condition, the pulleys being untrue. The accident took place while the deceased was attempting to place a belt on a pulley with a stick.

Accident on Railway.

In an action against the Grand Trunk Railway Company, brought by a widow for the death of her husband, damages were awarded for \$2,500 to the plaintiff, each side to pay their own costs, this amount to include the insurance which the deceased was entitled to as a servant of the Company. The deceased, who was engaged in the ash-pit, was riding on the steps of the tender of a locomotive, when he was caught by the corner of the fence enclosing cattle yard near the freight sheds, at Brockville, resulting in his death a few hours after the accident.

(Sawyer *v.* Grand Trunk Railway Company.)

Boys Under Age.

On June 2, informations were laid by the Ontario Factory Inspector, before James Lagrois, of Rockland, and Peter Stewart, of South Indian, two of His Majesty's Justices of the Peace, charging the parents of six boys with permitting their boys, while yet under the age of fourteen years, to be employed in the mills at Rockland, contrary to the provisions of section 38 of the Ontario Factory Act. On the same date, informations were also laid against six persons designated as jobbers in these mills, for having employed these boys contrary to the provisions of section 3 of the Ontario Factory Act. Evidence was submitted by the inspector that he had, from time to time, covering a period of four or five years, warned the parents of boys,

and advised regarding the age when they might legally be employed, as well as the jobbers in these mills, of their duty and obligations in regard to the employment of young persons whose ages might appear in any way doubtful, and had frequently dismissed children under age from these premises, with a very definite warning to the persons directly responsible for their employment. Being convinced that the proprietors and management of the mills did not endorse or permit the illegal employment of children with their knowledge or consent, and satisfied that parents and jobbers had been instructed to observe the law, the inspector proceeded directly against the persons responsible for the violation. The cases were called by Crown Attorney Maxwell, of L'Orignal. Each of the defendants pleaded guilty to the charge laid against them. It being the first time these persons were before the court on a charge of this kind, the magistrates decided to impose a nominal fine of \$1 and costs in each case, except in the case of one parent, whose evidence was not very satisfactory, he having evidently prepared a false certificate in order to secure employment for his boy; in his case a fine of \$2 was imposed. Warning was given to all that any future violations of this kind would be severely dealt with.

Unsanitary Factory.

On May 16, an information was laid by the Ontario Factory Inspector against a rag and junk dealer in the City of Ottawa, charging him with keeping his factory and premises in an unsanitary condition, and not keeping his closets properly separated, in accordance with the requirements of the Factory Act. The case was heard on the above date by Magistrate O'Keefe, who found the defendant guilty according to the evidence submitted, but before imposing a penalty, adjourned the case for a week, instructing the inspector to re-visit the premises at the end of that time and report to him what progress had been made towards complying with the requirements of the inspector under the provisions of the Factory Act. In accordance with the above, the case was resumed again on May 23. The inspector reported that some progress had been made towards complying with the regulations; in fact, some of the definite instructions had been reasonably complied with, but that there were yet certain important conditions to be observed. The magistrate then imposed a penalty of \$5, including costs, and advised the defendant that if he did not keep his premises properly in future they might be considered a public nuisance, and instructed the inspector that if the place was not kept in a satisfactory manner, it might be his right and duty to bring him before the Court until such conditions and requirements were fully observed.

Labour Gazette, July, 1911.

Scheme Between Parties.

Appeal by K. & S. from the judgment of an Official Referee in a mechanics' lien action to enforce a lien for bricks supplied in the erection of a certain building. The referee dismissed the claim. An appeal to the Divisional Court from the Referee's judgment was dismissed with costs. Mr. Justice Riddell gave a written judgment in which he stated that the Court had called upon the Referee for the reasons for his judgment, which had been furnished, and from which it appeared that the brick, which, it was claimed, kept the lien alive, were furnished after the building was completed, and were not to be used in the building. This was the outcome of a scheme between the parties, in bad faith, to advantage the appellants at the expense of others; and did not come within the Act.

(*Renney v. Dempster*, Ontario, W.N., 1303.)

Damages for Alleged Negligence Refused.

In the case of *Edward Hanley vs. Cummer Ice & Coal Company*, the plaintiff asked the County Court Judge at Hamilton, to award him \$500 for injuries received while an employee of that company. Hanley claimed that he fell through a hole in the company's ice-house, owing to the fact that the light was so poor that he could not see it. He further alleged that it was dangerous to allow the hole to remain uncovered, and that it would have been a simple matter to guard or cover the hole, and thus prevent an accident such as befell him. In falling, his knee cap was torn, knee sprained, and leg bruised. As a result he was confined in an hospital for two weeks and had to undergo an operation, which will have to be repeated in the near future. A number of witnesses, who had seen the hole, proved that the place was dangerous to public safety. After all the evidence had been submitted, Judge Snider held that negligence on the part of the company had not been shown, and he granted a non-suit.

Labour Gazette, September, 1911.

Workman's Compensation Act.—Negligence—Assessment of Damages.

An appeal by the plaintiffs to the Court of Appeal from a judgment of Mr. Justice Clute at the trial, entered for plaintiff upon the findings of the jury. The plaintiff sued as administratrix of the estate of her late husband, George William Dawson, on behalf of herself and Sarah Dawson, her husband's mother, to recover damages for his death, alleged to have been caused while a workman in the defendant's employment, by their negligence. The deceased was foreman of the defendants' repair shop, and on November 20, 1908, was ordered by the superintendent to do certain work upon an overhead wire in order to permit a swing bridge, across which such wire had been placed, to be opened, and while engaged in doing such work he fell from the ladder upon which he was standing, and was instantly killed. The work which he was called upon to do was in the nature of emergency work and not in the line of his ordinary duties. The ladder, supplied by the defendant, was a substitute for the safer repair car commonly used for doing such work. There were questions of more or less importance at the trial, as to whether the deceased was killed by falling from the ladder simply, or by a shock of electricity from an insufficiently insulated wire, or by a combination of these alleged causes. And a further question as to whether or not he had been guilty of contributory negligence in not using a pair of gloves supplied by the defendants for the purpose of being worn when handling live wires. A release was pleaded, but was abandoned at the trial. The plaintiff had received the sum of \$1,000, the proceeds of an accident insurance policy on the life of her husband, which the defendants at the trial and on the appeal contended should be deducted from any sum to which the plaintiff might be held entitled. The jury found (1) that the defendants were guilty of the negligence which caused the accident; (2) in not repairing the feed-wire to the bridge; (3) the death was caused by a defect in the condition of the ways, etc., (in the language of the statute): (4) the particular defect being in not repairing feed-cable on bridge and not providing safe ways to repair or connect jumper at bridge; (5) and (6) the death was caused by Superintendent Robertson, a person to whose orders the deceased was bound to conform, and did conform, taking him from his regular work, and in not providing him with safe appliances; (7) Q. Could the deceased, by the exercise of ordinary care, have avoided the accident? A. No, by not having proper appliances, and in making connections, deceased lost his balance

and fell to the ground; and (9) they assessed the damages at \$1,200. The main ground of the appeal was that it was erroneous for the trial judge to increase the finding of \$1,200 by the jury by the amount of the insurance money. The Court of Appeal held that, judgment at the trial having been given in favour of plaintiff, a new assessment of damages was permissible. The election to be made within 30 days. Costs of appeal to the defendants. If defendants take advantage of new assessment, the costs of the trial to be costs in the cause.

(*Dawson v. The Niagara, St. Catharines and Toronto Railway Company*. 19 Ont. W.R., 242.)

Negligence—Personal Injury to Laborer.

An appeal by the defendant to the Divisional Court from the judgment of the senior Judge of the County Court of the County of York, and a cross appeal by the plaintiff as to the amount of damages. The plaintiff, on May 28, 1910, was at work as a labourer upon Yonge Street, in the City of Toronto. He was "paving" alongside the street railway track. He was on the west side of the track about 27 feet southerly from the corner of Scollard Street, and was kneeling on one knee. The distance between the west rail and the curb at that point was 14 feet 6 inches. Plaintiff's foot projected westerly 3 feet, which left the space of 11 feet 6 inches between his foot and the west curb. The defendant's servant, Stanley J. Kemp, a young man of about 16 years of age, was driving a horse with light rig. He had just come out of the stable, and drove easterly on Scollard to Yonge, turned down Yonge, and one wheel of the rig went over plaintiff's foot, causing the injury complained of. Kemp says he saw the plaintiff and he thought the plaintiff saw him. Kemp was experienced in driving and his horse was going, as he says, only at a slow walk. Under such circumstances there would be no excuse, in the opinion of the Court, if plaintiff's story was correct, for the accident. The so-called excuse given by Kemp was "that in going round the corner, the back wheel caught the curb, and slung it over and it went over plaintiff's leg." The trial Judge did not accept as correct the explanation given by Kemp. There certainly was evidence of negligence, and the question was wholly for the trial Judge. Upon the evidence the conclusion would be warranted that, Kemp, having seen the plaintiff, carelessly drove too close to him, and, seeing the danger, turned the horse sharply to the west, but not in time to prevent one wheel going over plaintiff's leg and causing the injury. All we need say, said the Court, is, that there was evidence of negligence, and we must so say. Had there been a jury the case could not have been withdrawn from them, and a verdict for the plaintiff for \$150 would not have been disturbed. The appeal of the defendant should be dismissed with costs. There is no reason for increasing the damages. There was no permanent injury. The plaintiff has had good, practically complete recovery. The cross appeal should be dismissed with costs. As a whole the Divisional Court held that, in a non-jury trial for personal injuries, the trial Judge's verdict and assessment of damages must not be changed without special reason.

(*Wright v. Radcliffe*, 19 Ont., W. R. 439.)

Injury to Persons—Negligence—Contributory Negligence.

A car cleaner, employed by the defendants, was injured through being struck by a locomotive engine while walking upon the track upon which the engine was moving. The jury at the trial found that the injured party was not guilty of any negligence which caused or contributed to the accident, but that the negligence

which caused the accident was improper light of yards during the time of alterations, and the train being a little ahead of time, running at an excessive speed. Chief Justice Mulock, who presided at the trial, in his charge to the jury, said: "It is said that the train came in at an excessive rate of speed, and here you have a conflict of testimony also. What is an excessive rate of speed? You cannot fix a particular rate and say that it is excessive?" The jury did not answer the charge of failure to ring the bell. The defendants appealed from these findings, but the findings of the jury were in favour of the plaintiff. Upon an appeal to the Court of Appeal, Chief Justice Moss held, that when a jury exonerates an injured party from the charge of contributory negligence, upon evidence which, but for the finding, would appear to show very convincingly that he was the author of his own injuries, the Court should ascertain whether there is evidence to find actionable negligence on the part of the defendants which actually caused the injury, and whether the findings of the jury are upon elements upon which the plaintiffs do not rely. Charges expressly put to the jury upon which the jury do not make a finding must be taken to have been negatived. Mr. Justice Meredith was of opinion that there was no duty owed by the defendants to the plaintiff regarding the time of arrival of any of its trains; and that there is no rule of law limiting the rate of speed of railway trains in the interest of railway workmen. The appeal was allowed and the action dismissed with costs, if demanded.

(*Paquette v. Grand Trunk Railway Company*, 19 Ont., W. R. 305.)

Labour Gazette, October, 1911.

Workmen's Compensation for Injuries.

An appeal was taken to the Divisional Court by the defendants from the judgment of Mr. Justice Sutherland, in an action tried at Brockville with a jury. The plaintiff was the widow of a man who was killed while in the defendants' employment in their factory, and the action was to recover, for herself and her two children, damages for his death. The man was killed by a blow from a stick which he was using in attempting to adjust a belt upon a fixed pulley on the main shaft in the defendants' factory, while this shaft was rapidly revolving. The questions submitted to the jury, with their answers, were as follows: 1. Were the injuries which occasioned the death of the deceased caused by any negligence of the defendants? A. Yes. 2. If so, wherein did such negligence consist? A. (1) in defect of pulley on main shaft; (2) by defective way of adjusting belt; (3) by not having sufficient room for men while in the discharge of their duties; and (4) for poor system of management. 3. Were the deceased's injuries caused by any negligence on his part? A. No. 4. If so, wherein did the negligence consist? 5. Could the deceased, by reasonable care, have avoided the accident? A. We think not. The jury assessed the damages at \$1,600, apportioning \$800 to the plaintiff and \$400 to each child. Chief Justice Falconbridge said that, in the answer to question 2, No. (2) above was alone required to be considered. No. (1), the small defect or slip out of the rim of the pulley, was practically abandoned at the argument. No. (3) a mere temporary obstruction, not affecting the permanent condition of a way, is not a defect in the condition of a way: (Referring to *McGiffin v. Palmer's Company*, 10 Q. B. D. 1); and the crowding was caused by the deceased himself depositing closet-seats there. No. (4) is not warranted by the evidence. The evidence, however, justified the answer (2). The plaintiff can recover only under the statute (the Workmen's Compensation for Injuries Act), and the damages must be reduced to

the statutory limit, \$1,500, apportioned as follows: to the widow, \$750; to each child, \$375. With this variation the appeal is dismissed. Because of this small reduction, the defendants are ordered to pay only three-fourths of the plaintiff's costs of appeal. Mr. Justice Britton agreed in the result. Mr. Justice Riddell dissented. He was of opinion, for reasons stated in writing, that, upon the findings and evidence, the plaintiff could not succeed, and that the appeal should be allowed and the action dismissed with costs.

(*Kirby v. Briggs*, 2 O. W. N., 1511.)

Collapse of Building During Construction.

Appeal by the defendant Reid from the order of a Divisional Court (21 Ont., L. R. 545) affirming the judgment of Mr. Justice Latchford at the trial, in favour of the plaintiff, upon the findings of a jury. Leave to appeal to the Court of Appeal was granted upon the appellant undertaking to pay the costs of the appeal in any event. The action was for damages for injuries sustained by the plaintiff by the collapse of the appellant's building, in the City of London, the plaintiff having been at work as a clerk in a neighbouring building when the collapse occurred. The Court of Appeal directed a new trial. Mr. Justice Moss said, that it would aid materially in arriving at a final conclusion as to the defendant Reid's liability in law, if more light was thrown upon the part of the case relating to the employment of and instructions to the architects by whom the plan was prepared, and under whose direction the work of altering the building was done, and his knowledge and means of knowledge of the condition of the walls, as well as his competency. Mr. Justice Garrow held, that an owner may be liable, although out of possession, if he created or permitted to be created the nuisance complained of, or if the injury complained of was brought about through the defective condition of the premises which it was his duty, under a covenant with his tenant, to repair. The alterations which brought about the disaster were none the less Reid's because he did not perform the work with his own hands, for he authorized and commanded it by an express covenant in the lease. The injury was the direct consequence of the very thing contracted to be done, for which the defendant Reid was responsible, unless otherwise excused. His real defence must be that, in doing as he did, he took reasonable care; and the question was one of fact—did he, by employing an independent contractor, and by adopting and acting upon a plan prepared by an architect, do all that a reasonable man, in such circumstances, should have done? That was a question for the jury, to whom it was not clearly submitted at the first trial. Mr. Justice Maclaren held, that in such a case as this, it is the tenant or occupier, and not the landlord, who is responsible to third persons. When the building collapsed, the tenant was actually in possession under the lease. The defendant Reid was not liable for an accident resulting from the negligence of the tenant or his architect, in the circumstances of this case. The plaintiff did not make out such a case as would entitle her to a verdict. Mr. Justice Riddell held, that the defendant Reid was not responsible for the negligence of his tenant; the tenant was not the agent of Reid in making the change in the building—nor could it be fairly said that the change was being made for Reid. The improvements were to become and remain the property of Reid, but the changes were for the defendant's advantage and at his desire. The mere fact that there was a possibility that the work would be done in such a way as to do harm, would not fix Reid with liability—the use of the building in the manner contemplated by the lease would not naturally and necessarily cause damage. All the facts, however, not being before the Court, there should be a new trial.

(*Earl v. Reid*, (1911), 23 Ont., L. R. 453.)

Master and Servant—Negligence—Injury to Servant.

An appeal by the defendants from the judgment of Chief Justice Mulock, upon the findings of a jury, in favour of the plaintiff. The action was brought to recover damages said to have been caused to the plaintiff, through the negligence of the defendants, under the following circumstances: About the middle of June, 1910, the plaintiff, an English lad, eighteen years of age, who had been in Canada for about three years, was employed by the defendant's steward, to act as assistant porter. At that time one Charles Tabbert was the head porter. One of the head porter's duties was each morning and evening to load and fire a small brass cannon. The plaintiff was instructed to assist the head porter in this operation, which he did on several occasions. He had also assisted him in loading the cartridges with powder, which was done in the basement of the club-house. Some of the cartridges or shells, which were also of brass, had expanded, and required to be sand-papered to make them fit. This was done from time to time by the head porter. Of seven shells produced in Court, five fitted, and a sixth went in with some pressure from the fingers. When the cartridge did not go in easily, Tabbert used the ramrod to force it in. The plaintiff saw him doing so when he was assisting. Tabbert seems to have deserted his employment on June 30; and the plaintiff was promoted to his place as head porter. What took place on the occasion of his promotion was thus described by him in his evidence: "I was cleaning the yard with the hose, and he (the steward) came up to me and said, 'Charlie is gone, and you will take his place and do his duty,' and asked me if I understood how to fire the gun: and I said 'Yes, sir,' and he said, 'If I would be a good boy there would be more money for me.'" The plaintiff then, as head porter, loaded and fired the gun himself, once July 1, and again the morning of July 2, using the ramrod as he had seen Tabbert use it to force in a shell inclined to stick. And it was while loading it in the evening of that day that the explosion which injured him occurred. He had partly inserted a shell which stuck. He had brought out from the basement two shells, loaded and capped. The other was left by him lying on the grass beside him. This he picked up, intending, as he says, to pick up the ramrod, and had it in his right hand, when it exploded, and he was severely injured. The partly inserted cartridge did not explode. The plaintiff said he did not remember exactly what took place. He did not remember using the shell in his hand to drive the other in; but he did not deny, and in effect admitted that that was what he was doing with it when the explosion occurred, which entirely agreed with the evidence of two witnesses called for the defence, and was assumed to be the fact by the Chief Justice in his charge to the jury. And, unless that was so, that the explosion occurred because the plaintiff was using the shell which exploded, as a hammer, there was no explanation given nor cause shown in the evidence for the explosion—a matter vital to the plaintiff's case. In answer to the questions put to them, the jury found negligence on the part of the defendants, and the absence of contributory negligence on the part of the plaintiff. Judgment was given in favour of the plaintiff for \$3,975. In the judgment of the Court of Appeal, delivered by Mr. Justice Garrow, he said that he was clearly of opinion that the action should have been dismissed upon the ground that there was no evidence from which the jury could reasonably infer that any act of negligence on the part of the defendants had caused the injury—that, in fact, the injury, on the undisputed evidence, was solely caused by the plaintiff's own extraordinarily careless act in using the shell which exploded in the manner described. How there could be any question for the jury of the defendants' system in carrying on their operations, or of proximate cause other than the plain and obvious one, he was.

quite unable to see. And he was equally at a loss to see how the plaintiff's case could be supported upon the ground of the alleged failure to instruct. The plaintiff was not a baby, or even a youth of tender years. He had been in Canada, first in Quebec and afterwards in Ontario, earning his living, for several years. He was filling a man's place and getting a man's pay. He had received certain instructions, which he was not following when he was injured. He had not, it is true, been told not to use a loaded and capped shell as a hammer—an instruction which would scarcely have been regarded as necessary by the most careful of masters. When he received his promotion, he stated to the defendant's representative that he knew how to fire the cannon, which, of course, included loading it; and if, at variance with this statement, he intended to rely upon an ignorance so gross as to be almost inconceivable in one of his years and experience, he certainly ought to have had the courage to pledge his oath to the fact. There was, in the Judge's opinion, under all the circumstances, no proper evidence to warrant submitting the questions which were submitted to the jury, and the action should have been dismissed. The appeal should, therefore, be allowed, and the action dismissed, both with costs, if demanded.

(*Smith v. Royal Canadian Yacht Club*, 3 O. W. N., 19.)

Labour Gazette, November, 1911.

Damages for Loss of Both Legs.

Lewis Martin, night yardmaster for the Grand Trunk Railway Company, who, in an accident last November, lost both legs, was awarded \$6,600 damages at the recent sittings of the High Court at Brantford. Judgment, however, was reserved on points of law, by Chief Justice Mulock. Martin, prior to the accident, ordered the switch turned, and it was through the failure of an employee to carry out the order that he was struck by the yard engine on the tracks on which he was walking.

Damages for Incompetent Motorman.

A jury at the Civil Assizes in Toronto have awarded Wm. Fleming \$1,200 damages against the Toronto Railway Company. Fleming asked \$5,000. He was injured when a fuse blew out on a King St. car, in August, 1910. In charging the jury, Mr. Justice Middleton pointed out that the car was equipped with the most up-to-date appliances, the question being, whether this equipment was in good order. The jury found that the motorman was not competent, blaming him for not applying the air-brake when the accident happened. They also found that the car had not been properly inspected.

Labour Gazette, December, 1911

Injury by Servant's Negligence.

Appeal by the plaintiff from the judgment of Judge Snider, judge of the County Court of Wentworth, who (by consent) tried the action, which was in the High Court, and dismissed it. The action was brought by a workman to recover damages for injuries sustained by him while in the employment of the defendants. The plaintiff had his leg fractured in two places. Negligence on the part of the defendants was charged; but the trial judge found that there was no actionable negligence. While dismissing the action, he assessed the plaintiff's damages, provisionally, at \$1,500. The following were the facts: The plaintiff and four

fellow-workmen were moving an iron beam, which weighed two and a half tons, from one side of the defendant's works to the other, using power hoists. Hooks, resembling ice-tongs, with a ring in the top, were spread across the beam and hooked over the edge on each side. A hook let down from the hoist was hooked into this ring, and the beam then lifted, to be carried, thus suspended, to its destination. A pile of iron stringers lay on the floor, in the direct course of the moving beam. The hoist would not raise it high enough, with the long hooks at first in use, to pass it over the pile of stringers, and so the defendant's foreman handed a shorter pair of hooks to the plaintiff and his fellow-workmen to be substituted for the long hooks. The plaintiff was in the act of placing the hook of the block of the hoist in the ring attached to the pair of shorter hooks, when those hooks slipped or spread, and the beam fell, injuring the plaintiff. The appeal was heard by Chancellor Boyd and Justices Britton and Middleton, each of whom gave reasons for holding upon a review of the evidence, that the cause of the injury was the use of hooks which were too short, and that the defendants were liable, the foreman having directed the hooks to be used. Appeal allowed with costs, and judgment to be entered for the plaintiff for \$1,500 with costs.

Smith v. Hamilton Bridge-Works Co., 3 O. W. N. 177.

Labour Gazette, Ottawa, January, 1912.

Master and Servant—Workmen's Compensation Act.

Appeal by the defendants to the Court of Appeal from the judgment of Chief Justice Falconbridge, in favour of the plaintiff, upon the findings of the jury, in an action for damages for injuries sustained by the plaintiff, while in the employ of the defendants as car repairer. The plaintiff and one T. were both employed by the defendants. The plaintiff was assisting T. in repairing a car standing on a track in the defendants' yard, when the yard-engine propelled other cars against the car under repair, and injured the plaintiff, who brought this action to recover damages for his injuries, under the Workmen's Compensation for Injuries Act. The plaintiff alleged negligence on the part of T., a person in a position of superintendence to whose orders the plaintiff was bound to conform and did conform, in not placing a flag or flags in a position to give warning that work was going on upon the track. At the trial, the jury, in answer to questions, found: (1) that the plaintiff's injuries were caused by negligence of the defendants; (2) that the negligence was the neglect of T. in not placing the flag for protection; (3) that the injuries were caused by the negligence of a person in a position of superintendence over the plaintiff, and to whose orders he was bound to conform; (4) that T. was that person, and his negligence consisted in not placing the flag; (5) that the plaintiff's injuries were not caused by his own want of care: "it was no part of his duty to place these flags;" and they assessed the damages at \$1,980: The Court held (Mr. Justice Meredith dissenting) that, notwithstanding that the jury had not found that T. was exercising superintendence at the time of the injury, and had not found that the plaintiff did conform to T.'s orders, yet, having regard to the evidence and the judge's charge, the findings were sufficient, under the Workmen's Compensation for Injuries Act, to support a judgment for the plaintiff. *Marley v. Osborn* (1894), 10 Times L. R. 388, was specially referred to.

Deck Hands in Court.

Seven deck hands, all of Toronto, were recently charged at the Police Court in the City of Hamilton, with refusing to obey the orders of Captain Henderson, of the "Macassa." The prisoners refused to help to "coal" the steamer. Magistrate Jelfs told them they were liable to from four to twelve weeks' imprisonment, but he allowed them to go, as the steamboat company did not want them sent to jail.

TRADE DISPUTES IN ONTARIO.

Labour Gazette, February, 1911.

Strike of Silver Miners at Silver Centre.

On January 16, about 35 miners employed by the Keeley Mine, Limited, at Silver Centre, declared a strike on account of a reduction of wages.

Strike of Iron Moulders at St. Catharines.

On January 3, a strike of moulders employed by the McKinnon Dash and Metal Company, took place at St. Catharines. It was stated by the company that the strike arose because a majority of the moulders refused to work unless the company discharged the foundry foreman. The men also lodged a number of complaints in regard to shop conditions, alleging that: (1) work was not priced when given to the men; (2) they had to wait for forms; (3) there was poor ventilation; (4) the runways were not safe. They also demanded that the men should be present when prices were fixed for work, and that the firm receive a committee from the men whenever a grievance arises. On January 4, the men requested the good offices of Mayor J. M. McBride, of St. Catharines, and Ald. James A. Wiley, of the District Trades and Labour Council, to arrange a settlement. The company being willing that these two should act as conciliators, a conference was held on Jan. 5, and a settlement was quickly reached. The company agreed to have price tags placed on the work when given out, to do away with the waiting for forms, to improve the ventilation, and to make the runways safe, to receive a committee of the men if the foreman could not adjust any grievance that may arise, and to take all the men back, giving them their own benches. The demands that the men be present when the prices are fixed, and that the foreman be discharged, were refused.

Strike of Fur Workers at Sandwich.

On January 14, a strike of seven fur workers, involving 25 other men, took place in Sandwich, on account of the refusal of the employers to grant an increase of 10 per cent. in wages. The men had been receiving from 18½c. to 25c. an hour.

Labour Gazette, March, 1911.

Strike of Blacksmiths at St. Catharines.

On February 6, about 100 blacksmiths of the McKinnon Dash and Metal Company, were reported to have stopped work on account of the discharge of a foreman, the men fearing that they were going to be supplanted by foreign labour. At a conference between a committee of the men and the management, the latter assured the strikers that the company had no intention to supplant local labour with foreign

labour, and the men returned to work on February 8. The settlement of the strike was effected on the advice of Ald. James A. Wiley, of the District Trades and Labour Council.

Strike of Basket Makers at Stoney Creek.

On February 16, a strike of 17 basket makers took place at Stoney Creek, on account of the refusal of the employer to grant a demand for an increase in piece-work prices. The men had been receiving a winter rate of 40c. and 45c. per hundred, and they demanded an advance to 45c. and 50c. per hundred, which was equivalent to the summer scale. After some negotiations the strikers returned to work on February 21, under an agreement by which the winter rate remains in force until May 1, after which the summer rate would be paid. This would be two months earlier than in other years.

Labour Gazette, April, 1911.

Strike of Shoe Workers at Toronto.

On March 29, a strike of shoeworkers took place at Toronto, on account of their objection to the piece-work prices which were offered. According to the employers, 12 male and 3 female workers were directly involved, and 55 male and 10 female employees were indirectly involved. No settlement of the dispute was reported at the end of the month, but the employers stated that they were employing girls in the place of the foreigners who had gone out, as what they had been engaged in was girls' work.

Strike of Hotel Waiters at Toronto.

On March 3, about 52 waiters of the staff of the King Edward Hotel, at Toronto, declared a strike. According to a report received from the management of the hotel, the dispute arose from a fine imposed on one of the men who was charged with losing a check. The manager after finding that no food had been served on this check, waived the charge, but the men then demanded an increase in wages from \$25, to \$30 a month. This was refused. No definite settlement of the dispute was reported, but by the closing of one room for renovation, the hotel ceased to be affected by the dispute.

Strike of Billiard Table Makers at Toronto.

On March 29, about 42 billiard table makers of the firm of Samuel May & Co., at Toronto, declared a strike on account of the refusal of the employers to grant an increase of 10 per cent, in their wages. The dispute was still unsettled at the end of the month.

Lock-Out of Carpet Weavers at Toronto.

When the factory of the Toronto Carpet Manufacturing Co., at Toronto, was closed down in March for stock-taking, they were notified that their Brussels weavers had joined a union. As the company had a regulation in force to the effect that "No employee may be a member of any organization or union whose rules govern their conduct while in our employ," the following notice was issued to their men on March 22 :—

Memorandum for Weavers.

No. 1. We have been notified by Mr. Hibbard, of Falls River, that all our Brussels weavers belong to a union. This is against our rules and regulations, which all our employees signed when they came into our employ, and in breaking them by joining a union they render themselves liable to suspension or discharge.

No. 2. Any Brussels weaver wishing to enter our employ again will be required to sign an agreement pledging himself not to belong to any union. This pledge will be enforced. Our mill will be run absolutely as a non-union shop, which it has been ever since we started. Any grievance complained of by any individual weaver we absolutely pledge ourselves to look into, and if advisable and possible, to remedy it.

About 114 men were involved in this dispute, which was still unsettled at the end of the month.

Labour Gazette, May, 1911.

Strike of Billiard Table Makers at Toronto.

On March 30, about forty-two billiard table makers at Toronto, declared a strike on account of the refusal of the employers to grant the demand of wood-workers for an increase of ten per cent. in wages. About thirty other employees then went out in sympathy. Work was resumed on April 6, an increase of 1½c. per hour having been granted to cabinet-makers and machine hands. The former rate of wages averaged about 27c. per hour, and the increase represented an advance of about five per cent.

Strike of Journeymen Tailors at Ottawa.

On March 28, a strike of eight journeymen tailors took place at Ottawa, on account of the discharge of a female employee. It was claimed by the employer that she was incompetent, but it was alleged by the strikers that she was dismissed because she had joined the Journeymen Tailors' Union. On April 7, the dismissed employee was reinstated, and all the strikers returned to work.

Strike of Pattern Makers at Peterborough.

On April 18, about twelve pattern-makers employed in the Canadian General Electric Company's works, at Peterborough, Ont., went out on strike on account of the failure of the employers to grant their demand for an increase in wages. No settlement was reported during the month.

Strike of Painters at Port Arthur and Fort William, Ont.

On April 17, a strike of painters at Port Arthur and Fort William, took place, on account of the refusal of the employers to grant the demand for an increase in wages from 35 cents to 40 cents per hour. While no settlement of the dispute was reported during the month, the employers stated they had filled the places of the strikers.

Labour Gazette, June, 1911.

Strike of Maintenance of Ways Employees, M.C.R.

On May 3, the sectionmen employed on the M.C.R. between Niagara Falls and Windsor, ceased work on account of orders issued by the Michigan Central Railway Co., announcing a reduction of ten cents per day in their wages. Application having been made to the Department of Labour by the men for the establishment of a Board of Conciliation and Investigation, an officer of the department was sent to St. Thomas to investigate and confer with the two parties involved, with the result that the dispute was terminated on May 26, the Company agreeing to take back the employees at the rates in force previous to the strike. It was reported that between 1,200 and 1,400 employees were involved in this dispute.

Strike of Structural Ironworkers at Toronto.

On May 1, a strike of structural ironworkers took place at Toronto, Ont., on account of the refusal of the employers to grant an advance from thirty-five cents to forty cents per hour in wages. It was claimed by the men that the advance was requested on the grounds that they had only nine months' work in the year, and that their wages averaged \$13 a week. The hazardous nature of the work was given as another reason for the demand. It was stated that five firms and 200 men were directly affected, and three firms indirectly affected. Prior to the strike several conferences had been held between the two parties, but they could not arrive at an agreement. One firm, employing fifteen men, granted the increase demanded. On May 31, the strike was declared off, and work was resumed on the following day, on the terms prevailing before the strike.

Strike of Bridge and Structural Ironworkers at Hamilton.

On May 1, a strike of about fifty bridge and structural ironworkers took place at Hamilton, in which two firms and fifty men were involved. The cause of the dispute was the demand for an increase in wages from thirty-five cents to forty cents per hour. During the month, conferences were held between the employers and their employees, but without result. On May 31, the strike was declared off, and work was resumed on the following day, on the terms prevailing before the strike.

Strike of Iron Moulders at Toronto.

On May 4, a strike of iron moulders and coremakers took place at Toronto, on account of the refusal of twelve firms to grant a demand for an advance in wages from \$2.90 to \$3.15 per day for moulders and from \$2.65 to \$3 per day for coremakers. It was reported that about 270 men were involved in the dispute. On May 12, a settlement was reached with eleven of the firms involved by which the moulders were granted \$3.10 per day and coremakers \$3 per day. The remaining firms would not grant the increase, and as a result thirteen men were still out at the end of the month.

Strike of Carpenters at Hamilton.

On May 1, a strike of carpenters and joiners took place at Hamilton, in which it was reported that about 300 men were involved. The cause of the dispute was a demand for an increase in wages from thirty-five to forty cents per hour, and signed working rules. During the month between thirty-five and forty contractors signed the agreement presented by the men, but about forty strikers were still out at the close of the month. Members of the Contracting Builders' Association declined to sign the agreement, but offered an increase from thirty to thirty-seven and one-half cents per hour. While the dispute was in progress a number of the strikers left Hamilton and sought work elsewhere.

Strike of Carpenters at Welland.

On May 2, a strike of carpenters took place at Welland, on account of the refusal of the contractors to grant the demand for a minimum wage of thirty-five cents per hour, with a nine-hour day, the former rate having been thirty cents per hour. About fifteen firms were involved in this dispute. It was claimed by the men that during the month ten out of the fifteen employers agreed to a new scale of wages, and that nearly all the men were working at the increased rate, but on the other hand, it was claimed by the employers that no large contractor had accepted the terms of the union, and that many men were still idle.

Strike of Builders' Labourers at Berlin.

On May 12, a strike of Builders' Labourers took place at Berlin, on account of the refusal of the employers to grant a demand which they had made on May 1, for an increase of five cents per hour. The employers offered an advance of two cents per hour, but this was refused as the men claimed they only worked eight hours a day. The employers then offered to pay them at the old rate of twenty cents per hour with a nine-hour day. This was also refused. About sixty-five employees were directly involved in this dispute, and the same number of masons were indirectly affected by it.

Strike of Stonecutters and Masons at Kingston.

A strike of stonecutters and masons took place at Kingston during May, in which two firms and from fifty to sixty men were reported to have been involved. It was stated by the Stone Masons' Union that the dispute was due to the claims made by the two unions of Stonecutters and Masons, for the right to do the same class of work, namely, corners, jambs, and ringstones. It was claimed by the stonecutters that they made a proposition that the matter be left in the hands of the contractors who might hire stonecutters or masons to suit themselves. The masons, however, would not agree to this proposal, and no definite settlement of the dispute took place during the month.

Strike of Freight Handlers at Hamilton.

On May 1, a strike of freight handlers employed on the Canadian Pacific Railway and the Toronto, Hamilton and Buffalo Railway took place on account of the refusal of the company to grant the demand for an increase in wages from sixteen cents to twenty cents per hour. It was stated by the Company that about twenty-nine men were involved in this dispute. No definite settlement of this dispute was effected, but by May 5 the Company was reported to have filled the places of the strikers with new men at sixteen cents per hour, the strikers in the meantime having found other employment.

Strike of Longshoremen at Toronto.

A strike of about forty longshoremen took place at Toronto on May 10. It was stated by the Merchants Mutual Line that the dispute arose because they were having work done by a Stevedore Company instead of employing the men direct themselves. On the following day work was resumed, the men accepting employment with the Stevedore Company.

Strike of Labourers at Smith's Falls.

On May 2, about 200 labourers employed by the Smith's Falls Malleable Castings Company declared a strike on account of the refusal of the employers to grant a demand for an increase in wages from \$1.45 to \$1.60 per day. Work was resumed on May 6, the strikers accepting the rate of \$1.50 per day.

Strike of Iron Moulders at Guelph.

On May 1, a strike of iron moulders employed with the firm of Taylor, Forbes and Company, of Guelph, took place in which, according to the Company, thirty-two men were directly, and thirty-five indirectly affected. It was stated by the Company that the men objected to working three nights after six o'clock and one night until 6.30 p.m., but it was claimed by the men that the cause of the dispute

was the reduction in piece-work prices which they allege would average \$3 per week. The Company claimed that the average earnings of the men were \$3.13 per day for nine hours work and 300 days in the year. No definite settlement took place, but the Company claimed to have paid off the strikers and to have procured new men to take their places.

Strike of Garment Workers at Hamilton.

On May 30, a strike of forty male and sixty female garment workers took place at Hamilton, on account of their objection to the introduction of the piece-work system by the Coppley, Noyes, and Randall Company. Work was resumed the following day on the promise of the employers that the piece-work system would not be introduced.

Strike of Furnace Tenders at Niagara Falls.

On May 1, a strike of furnace tenders employed with the American Cyanamid Company took place at Niagara Falls. The strike arose from the action of the Company in reducing the number of furnace tenders from three to two men per furnace, and at the same time increasing their wages from twenty-five cents to twenty-seven and one-half cents per hour. The men demanded thirty cents per hour. No definite settlement of this dispute was reached, but it was reported that in a few days the places of the strikers had been filled on the Company's terms.

Labour Gazette, July, 1911.

Strike of Electrical Workers at Toronto.

On June 12, a strike of about 150 electrical workers employed by eighteen firms took place at Toronto, on account of the refusal of the employers to grant a demand for an increase in wages from 35 to 40 cents per hour. The dispute did not affect electrical workers in the employ of the City corporation, with whom an agreement had been signed two weeks prior to the strike. Some of the men who went out returned to work the following day, their employers having agreed to pay the increased rates. No definite settlement was reported during the month.

Strike of Construction Labourers at Toronto.

On June 1, about 135 labourers employed on the Grand Trunk Railway at South Parkdale, near Toronto, declared a strike on account of the refusal of the Company to grant a demand for an increase in wages from 17½ to 20 cents per hour. On June 3, the men returned to work at the old rate of pay, no concessions having been granted.

Strike of Labourers, London.

On June 6, a strike of thirty labourers employed by the London Street Railway Company, took place at London, on account of the refusal of the Company to grant a demand for an increase in wages from 16 to 18 cents per hour, with Saturday afternoons off. The dispute was terminated the following day, some of the men being granted the increase, while new hands were taken on to replace the others.

Strike of Garbage Collectors at Hamilton.

On June 7, twenty garbage collectors employed by the municipality of Hamilton, declared a strike, making a demand for an increase in wages from \$2 to \$2.25 per day. On the following day the men were induced to return to work on the understanding that their demands would be considered by the works committee if they would give one week's notice.

*Labour Gazette, August, 1911.***Strike of Employees of the Consumers Gas Company, Toronto.**

On July 12, a strike of about sixty employees, firemen, pipe jumpers, and stokers, in the retort houses of the Consumers Gas Company, took place. The cause of the strike was the refusal on the part of the Company to grant the demand of the above employees for an increase in wages. The Company reported that, after investigation, it was found that the wages of their employees were higher than those paid to the same class of workmen throughout Canada, Great Britain and the United States. The men returned to work on July 17, on the conditions prevailing before the strike.

Strike of Pulp Beaters at Ottawa.

On July 19, a strike of eighteen pulp beaters took place at Ottawa, on account of the refusal of the J. R. Booth firm to grant a demand for an eight-hour day with three shifts, in place of an eleven and thirteen-hour day, alternate weeks with two shifts. On July 22, all the men, with the exception of two, returned to work on the conditions prevailing before the strike. about fifty-five men were indirectly affected by this dispute. Some of the paper-makers who were indirectly affected resumed work before the end of the strike.

*Labour Gazette, September, 1911.***Strike of Plumbers and Steamfitters at Berlin and Waterloo.**

A strike was declared on August 21, by fourteen plumbers and steamfitters employed by six firms at Berlin and Waterloo, six men being indirectly affected by the dispute. The object of the strike was to secure an increase in wages and shorter hours of labour. On August 22, an agreement was reached, according to which they received 30 cents per hour, with Saturday afternoon off, until November 1, after which date they would be granted 35 cents per hour, with a nine-hour day, and Saturday afternoons off.

*Labour Gazette, October, 1911.***Strike of Railway Yardmen at Hamilton.**

On September 20, a strike of eighteen yardmen of the Grand Trunk Railway Company, took place at Hamilton owing to their refusal to work under an alleged strike breaker, who had been temporarily appointed assistant yardmaster. The Company immediately assigned experienced yardmen from other branches to yard service and proceeded to fill the places rendered vacant by the strikers. About fifty firms were reported to have been indirectly affected by this dispute.

Strike of Cigarmakers at London.

On September 7, a strike of cigarmakers employed by the firm of Brener Brothers, took place at London on account of the employment of eight coloured men, with whom the other refused to work. On the next day the firm sent the eight men back to Montreal, from where they had come, and the strikers returned to work. About fifteen males and thirty-eight females were involved in this dispute.

*Labour Gazette, November, 1911.***Strike of Labourers at St. Thomas.**

On October 10, ten labourers employed on street paving at St. Thomas, stopped work on account of the refusal of the contractor to grant their demand for an increase in wages, and for the immediate payment of the wages due them. Ten other labourers continued at work, and the places of the strikers were all filled by October 13. The men who went out found employment elsewhere.

*Labour Gazette, Ottawa, January, 1912.***Strike of Cement Workers and Labourers at Wingham.**

On December 19, about fifty cement workers and labourers declared a strike at Wingham, Ont., on account of the refusal of the employers to grant a demand for an increase in wages from sixteen to twenty cents per hour.

BRITISH LABOUR NEWS.**Changes in Wages.**

The total number of workpeople whose wages were reported to be changed in the first quarter of 1911 was 309,180 as compared with 375,093 in the corresponding period of 1910. The changes arranged gave 107,859 workpeople a net increase of £7,291 per week and 201,321 workpeople a net decrease of £1,086 per week. The net effect of all the changes was thus an increase of £3,205 per week, as compared with a decrease of £2,326 per week in the corresponding period of 1910.

Changes in Hours.

The total number of workpeople reported as affected by changes in hours in the first quarter of 1911 was 10,541, the net decrease in their working hours being 66,890 per week.

Trade Disputes.

For the first quarter of 1911 the number of trade disputes was 134, the number of work people affected was 67,923, and the aggregate duration in working days 1,883,100, as compared with 81,138,052 and 2,372,900, respectively, in the corresponding period of 1910.

Lead and Other Poisoning.

During the first uarter of 1911 there were 150 cases and 10 deaths from lead and other poisoning and anthrax in factories and workshops, as compared with 122 cases and 14 deaths in the corresponding period of 1910. There were also 49 cases and 12 deaths from lead poisoning among painters and plumbers as compared with 42 cases and 8 deaths in 1910.

Fatal Industrial Accidents.

During the first quarter of 1911 the total number of workpeople reported as killed in the course of their employment (exclusive of seamen) was 714, as compared with 701 in 1910. The total number of seamen killed in the same period was 502 in 1911 and 224 in 1910.

Unemployed.

In the 395 trade unions, with a net membership of 759,605 making returns, 23,035 or 3 per cent. were reported as unemployed at the end of March, 1911, as compared with 5.2 per cent. at the end of March, 1910.

Changes in Wages.

The total of workpeople whose wages were reported to be changed in the first half of 1911 was 605,612, as compared with 449,094 in the corresponding period of 1910. The changes arranged gave 195,266 workpeople a net increase of £12,394 per week, and 407,946 a net decrease of £8,804 per week, while the remaining 2,400 workpeople had upward and downward changes, which left their wages at the same level as at the beginning of the year. The net effect of all the changes was thus an increase of £3,588 per week, as compared with one of £2,790 per week in the corresponding period of 1910.

Changes in Hours.

The total number of workpeople reported as affected by changes in hours in the first half of 1911 was 36,717, and the aggregate amount of the reduction 117,705 hours per week.

Trade Disputes.

For the first half of 1911 the number of trade disputes was 277, the number of workpeople affected was 197,441, and the aggregate duration in working days, 4,184,300, as compared with 212,208.634 and 3,392,500 respectively, in the corresponding period of 1910.

Lead and Other Poisoning.

During the first half of 1911 there were 447 cases and 51 deaths from lead and other poisoning and anthrax in factories and workshops, as compared with 355 cases and 43 deaths in the corresponding period of 1910. There were also 113 cases and 23 deaths from lead poisoning among painters and plumbers, as compared with 100 cases and 19 deaths in 1910.

Fatal Industrial Accidents.

During the first half of 1911 the total number of workpeople reported as killed in the course of their employment (exclusive of seamen) was 1,399, as compared with 1,510 in 1910. The total number of seamen reported as killed in the same period was 641 in 1911 and 555 in 1910.

Unemployed.

In the 394 trade unions, with a net membership of 758,666, making returns, 22,895 or 3 per cent. were reported as unemployed at the end of June, 1911, as compared with 3.7 per cent. at the end of June, 1910.

Changes in Wages.

The total number of workpeople whose rates of wages were changed, as far as reported, during the 9 months ending September 30, 1911, was 754,576, as compared with 484,587, in the corresponding period of 1910. The changes arranged gave 338,880 workpeople a net increase of £29,151 per week and 409,426 a net decrease of £11,559 per week, while the remaining 6,270 had upward and downward changes which left their wages at the same level as at the beginning of the

year. The net effect of all the changes was thus an increase of £17,542 per week as compared with an increase of £6,545 in the corresponding period of 1910.

Changes in Hours.

The total number of workpeople affected by the changes of hours of labour during the first 9 months of 1911 was 91,720. Of these 968 had their hours increased by 3,798 per week and 90,752 had an aggregate reduction of 544,892 hours per week.

Labour Disputes.

The number of disputes causing stoppage of work in the first 9 months of 1911 was 583, involving 672,936 workpeople, with an aggregate duration of over 8½ million working days.

Unemployed.

Of the 394 trade unions with a net membership of 779,761, making returns, 22,850, or 2.9 per cent. were reported as unemployed at the end of September, 1911, as compared with 4.3 per cent. the previous year.

Industrial Diseases.

During the first 9 months of 1911 the total number of cases of lead and other poisoning and of anthrax in factories was 560, as compared with 412 in 1910. The total number of deaths for the same period in 1911 was 38, and in 1910, 29. In addition there were 193 cases of lead poisoning and 38 deaths among house painters and plumbers in the first 9 months of 1911, as compared with 184 cases and 30 deaths in 1910.

Fatal Industrial Accidents.

During the first 9 months of 1911 the total number, exclusive of seamen, reported as killed in the course of their employment was 2,141, as compared with 2,197 in 1910. The total number of seamen reported as killed during the same period was 857 in 1911 and 741 in 1910.

Changes in Wages.

The number of workpeople reported as affected by changes in rate of wages in 1911 was 825,204, of whom 416,191 received net increases amounting to £37,664 per week and 399,216 sustained net decreases amounting to £11,737 per week. The remaining 9,797 had upward and downward changes which left their wages at the same level at the end as at the beginning of the year.

Changes in Hours.

The changes in weekly hours of labour taking effect in 1911 affected 105,537 workpeople. Of these 4,337 had their hours increased by 13,905 per week, 101,200 had reductions amounting to 574,140 hours per week.

Labour Disputes.

The number of trade disputes causing a stoppage of work in 1911 was 864, involving directly or indirectly 931,050 workpeople, with an aggregate duration of 10¼ million working days.

Unemployed.

In the 394 trade unions with a net membership of 788,986 making returns, 24,074, or 3.1 per cent. were returned as unemployed at the end of December, 1911, as compared with 5 per cent. at the end of December, 1910.

Industrial Diseases.

During the twelve months of 1911 the total number of cases of lead and other poisoning, and of anthrax in factories was 755 as compared with 574 in 1910. The number of deaths was 49 in 1911 as compared with 48 in 1910. In addition there were 263 cases of lead poisoning, including 48 deaths, among house-painters and plumbers in 1911, as compared with 232 cases and 35 deaths in 1910.

Fatal Industrial Accidents.

During 1911 the total number of workpeople reported as killed in the course of their employment, exclusive of seamen, was 2,960, as compared with 3,334 in 1910. The total number of seamen killed was 1,254, as compared with 1,102 during 1910.

APPENDIX.

Municipal Returns.

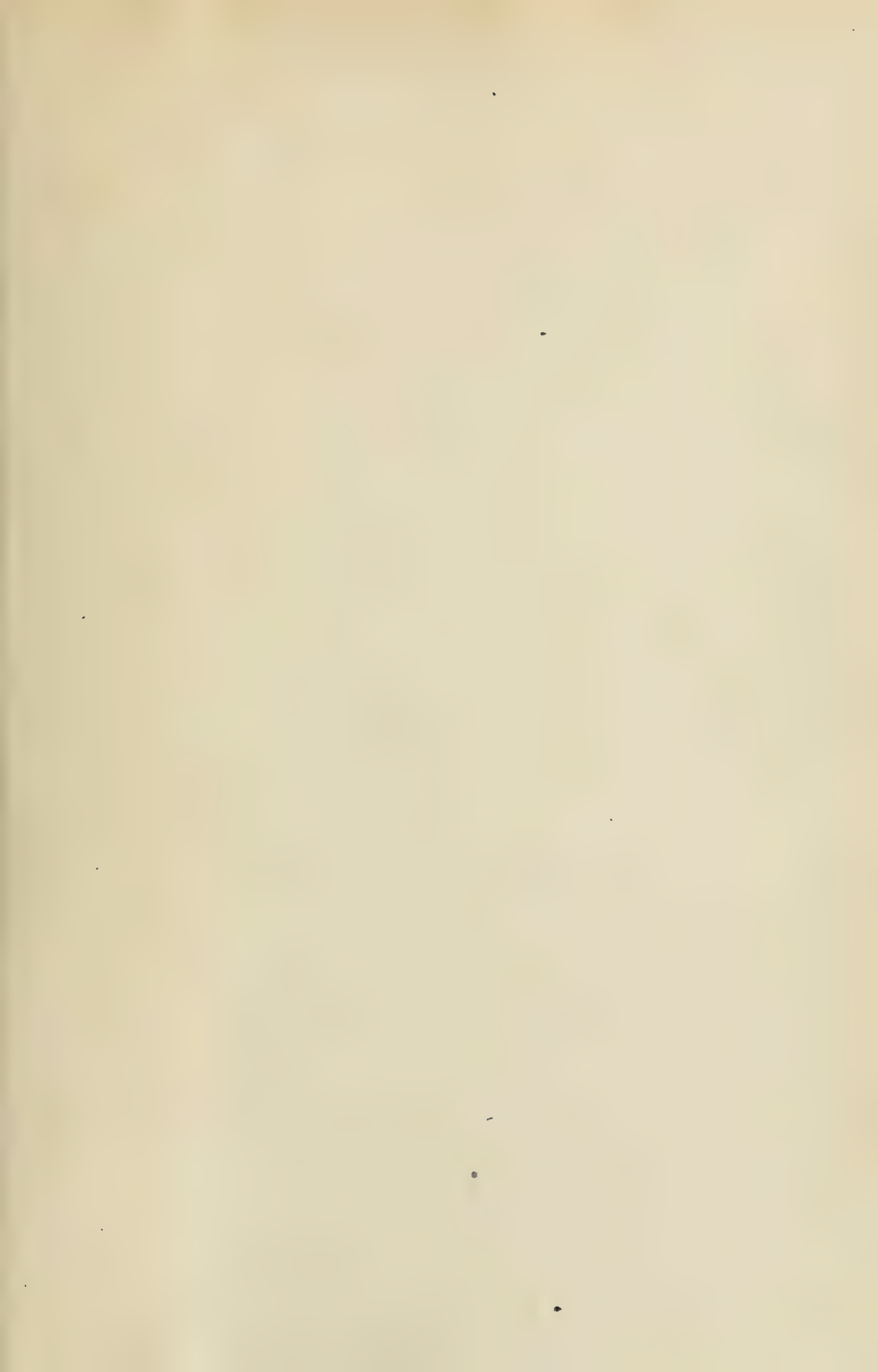
FOLEY, Tp.—Sawmill started. Good opening for sawmill to cut hardwood for furniture. Number of buildings erected 4; cost \$2,500. Amount expended on permanent improvements \$780. Andrew Oastler, Township Clerk, James Bay Junction.

TILBURY E. Tp.—Good opening for beet sugar factory. Number of buildings erected about 10; cost about \$10,000. Amount expended on permanent improvements \$12,070. Amount expended on sanitation \$388. Alex. Farquharson, Township Clerk, Fletcher.

Labour Unions.

NAME.—International Steel and Copper Plate Printers Union No. 6, Ottawa. Organized Nov. 21, 1900. Total membership 38; number of working hours first five days 42½; number of Saturday, 4½; wages paid weekly or fortnightly; no idle days; total number (union and non-union) employed at trade in locality 41; no difference in wages or hours between members and non-members; death benefit \$50; no special work for members. President, Wm. H. Kent, Wellington St. Corresponding Secretary, Edward J. Lane, 127 Osgoode St.; meets first Wednesday in month.

NAME.—Barbers International League, No. 467, Sarnia. Organized, Dec. 9, 1902; total membership 15; average earnings per week \$15; number of working hours first 5 days 56; number on Saturday 15; wages paid weekly; no idle days; total number (union and non-union) employed at trade in locality 23; non-members work longer hours for less pay; sick benefit \$5 per week for 16 weeks; death benefit \$75 to \$500; out of work benefit, if through contagious disease in family, \$5 per week; no special work for members; not in incorporated or registered. President, Murray Jaynes, 143 Front St. Corresponding Secretary, Wm. R. Knight, 140 Cromwell St; meets first Tuesday in month.





BINDING SECT. AUG 24 1967

